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SWEDISH WATER-POWER DEVELOPMENT.

[From Consul Stuart J. Fuller, Gothenburg.]

It is estimated that the water power in Sweden utilized in accordance with modern methods increased in 1911 by some 80,000 horsepower, aggregating at the close of the year 640,000 horsepower. The value of this power to the nation and its influence in the rapid industrial development going on in Sweden are incalculable.

Water-power developments here are of two classes: Those controlled and operated by the State and those controlled and operated by private interests. Of the increase for the year, 70,000 horsepower was made available by plants privately owned and 10,000 in the Trollhattan plant, owned by the State. The activities of the Government were largely devoted to the earlier construction stages of two large installations in the north, which, together, will furnish 95,000 horsepower when completed, so that the ratio of public to privately owned power actually made available during the year does not constitute a measure of these respective activities. As a matter of fact, the 70,000 horsepower includes many small plants of less than 100 horsepower each, embracing only two installations of 10,000 horsepower or more and only five of over 2,000 and less than 10,000.

Statistics of the New Power Plants.

Private activities found their field chiefly in southern and central Sweden. The height of the falls utilized varied from 7 feet to 243 feet, but was as a rule less than 49.21 feet. So far as is known, the dams were in all cases built by Swedish firms and the machinery furnished by Swedish manufacturers.

Of the new plants completed during the year, the largest is that at Mockfjärd, utilizing the waterfall known as Stopforsarna and developing 20,000 horsepower from a fall of 75 feet. The power is used for iron works and the installation is owned by Västerdalälvens Kraft Aktiebolag. The next largest is that at Forshult, develop-

ing 10,500 horsepower from a fall of 43 feet. This power is used for iron works and the plant is owned by Uddeholms Aktiebolag of Uddeholm, Sweden.

Rebuilt Plants—Incomplete Private Plants.

Of the rebuilt plants, the largest is the municipal plant of Skellefteå, located at Finnforsen, and developing 5,650 horsepower from a fall of 66 feet. The second is that at Domnarfvet, developing 4,700 horsepower from a fall of 20 feet and furnishing power to the iron works of Stora Kopparbergs Bergslags Aktiebolag, by which it is owned. This concern is installing an electrical blast furnace for the production of pig iron, in addition to its other large activities. The third in size is the property of Sydsvenska Kraft Aktiebolag and is located at Ofre Knared. The power, amounting to 3,000 horsepower, is produced from a fall of 32 feet and is sold for general distribution.

Incomplete private plants, both new and those undergoing extension and reconstruction, represented, at the close of the year, a total of about 25,000 horsepower, as compared with over 67,000 horsepower under way at the close of 1910. Practically all of this is represented by two new installations, one to develop 17,100 horsepower and the other 4,600. The largest is at Ljungafors and is owned by Stockholms Superfosfatfabriks Aktiebolag, of Stockholm, manufacturers of superphosphates and other fertilizers. The fall is 128 feet. The power is to be used in the manufacture of calcium cyanamid.

Summary of Activities for 1910 and 1911.

The following table constitutes a summary of the activities involving private plants of over 100 horsepower each in 1910 and 1911:

	Number.		Turbine horsepower.	
	1910	1911	1910	1911
Completed:				
New installations	21	12	56,835	38,092
Reconstructions and extensions	3	26	5,550	29,665
Under way but not completed:				
New installations	6	2	59,285	21,700
Reconstructions and extensions	3	1	7,900	1,800

The uses to which the power made available during the year and to be made available by plants begun within the year is to be devoted are as follows: Municipal, 13 plants; iron works, 12; mechanical wood-pulp mills, 8; paper mills, 7; textile mills, 5; chemical works, 1. The Government work completed at the end of the year consisted of the addition of 10,000 horsepower at the already existing plant at Trollhattan.

Nature of Uncompleted Works.

Work not completed at the end of the year consisted of preliminary and construction work at Porjus and at Alfkarleby, both in the north of Sweden, where large plants are to be installed by the State. At Porjus the work has progressed well beyond the preliminary stages. A temporary water-power plant has been in operation

since June 25, 1911, furnishing power and light for construction; a number of the permanent buildings have been completed, and large amounts of excavation and of concrete work have been finished. Surveys for the transmission lines have been completed and part of the material purchased. During the year, purchases of equipment included concrete mixers, mine hoists, electric cranes and derricks, machine-shop equipment, locomotive, air compressors, stone crushers, a steam road roller, pumps, electric motors, transformers, and light railway materials. The force employed on the works increased from 350 at the beginning of the year to 970 in October, after which there was some reduction on account of the setting in of cold weather. This plant, when completed, will develop 50,000 horsepower. The location is rather far from existing industries, being in the extreme north of Sweden not far from Lulea.

At Alfkarleby, near the east coast of Sweden and not far south of the town of Gäddede, is the site of the other Government water power. Surveys for this are practically complete and work has been begun on the construction plans. Work at the building sites commenced in the beginning of August. Some temporary buildings for quarters, etc., have been built and considerable excavation and blasting accomplished. A 300-horsepower temporary water-power plant will be installed and in addition two Diesel motors will be provided. At the beginning of 1912 the force at work consisted of about 350 men. This plant is designed to develop 45,000 horsepower.

Available Horsepower—Application of Electricity.

The total possible horsepower to be found in the streams of Sweden in such shape that it might be utilized is variously estimated at from two to nine million, and it probably approximates four million. The unfortunate feature is that so large a proportion of this undeveloped natural wealth is located in the north and in parts of the country where it is difficult to utilize it to advantage. With the improvement in transmission methods, however, this obstacle may in time become less important.

In addition to its general uses for operating machinery and street cars and for lighting, electricity is used in Sweden in rolling mills, mine hoists, mine drills, magnetic-ore separators, the electrochemical industries (which use large quantities), and the smelting of steel. Lately it has also been used for the reduction of ore to pig iron. The large quantities available have led to its use for the operation of agricultural machinery, thrashing machines, etc., and it is proposed to equalize the consumption throughout the 24 hours in cities by selling power at very low rates during the hours when the load is low, so that it may be introduced into the household for heating, cooking, and other domestic purposes for which, under ordinary rates, it is too expensive for general use. The transmission of power from Trollhattan to Copenhagen has been proposed and is still under consideration.

Manufacture of Electrical Apparatus—Trade.

As most of the water power is utilized through conversion into electricity, American manufacturers of electrical apparatus and supplies will doubtless be interested. The manufacture of electrical apparatus and supplies is a well-established industry in Sweden, and

the annual production of dynamos, motors, transformers, cables, insulated wire, electrodes, and electric lamps will exceed \$4,500,000 in value, to say nothing of the large production of telephone and telegraph apparatus.

The latest detailed figures available for exports and imports are those for 1909. According to these, the exports of dynamos for that year were valued at \$194,860. The distribution was world-wide, and it is interesting to note that 30 per cent of the exports went to Canada. Motors exported reached a value of \$59,343 and transformers a value of \$4,930. These two articles were widely distributed.

The importation of dynamos and motors seems to be decreasing. Of the dynamos imported in 1909 Switzerland furnished 60 per cent and Germany 30 per cent; of the motors, two-thirds were from Germany and the remainder from Switzerland; 60 per cent of the transformers came from Germany and the remainder from Switzerland. The values were as follows: Dynamos, \$78,429; motors, \$148,294; transformers, \$95,799.

Prior to December 1, 1911, the duty on imported dynamos, motors, and transformers was 15 per cent ad valorem. The tariff that went into effect then altered this to a specific basis, the present duty running from 15 to 55 öre (\$0.0402 to \$0.1474) per kilo (2.2046 pounds). Some idea of the relation that this bears to the value may be gained by considering the average value per kilo of imports in 1909, which was as follows: Motors, \$0.47; dynamos, \$0.42; transformers, \$0.33.

Electric lamps (incandescent filament) are both imported and exported. The imports are about twice the exports and in 1909 were valued at \$110,979. Ninety-five per cent came from Germany. Both exports and imports are increasing. The import duty on carbon-filament lamps is 1.50 crowns (\$0.402) per kilo. The duty on metallic-filament lamps has now been raised to 4 crowns (\$1.072) per kilo. The average value per kilo of the imports in 1909 was \$2.17.

Accumulators, practically all from Germany, were imported in 1909 to a value of \$130,362. This import shows a tendency to decrease. The duty on imports is 6 öre (\$0.0161) per kilo. Imports of rheostats, of which 90 per cent came from Germany, amounted to \$202,601 in 1909. They also show a tendency to decrease. Meters, the same proportion of which came from Germany, amounted to \$116,674.

By far the leading port in the importation of electrical apparatus and supplies is Stockholm. Supplies for the Government plants are generally purchased by advertisement and bids; but so short a time is allowed between the time of advertising and the limit of time for receiving bids that American manufacturers interested in such work would find it necessary to have a representative on the ground.

Consular Trade Conferences.

Consul General Amos P. Wilder, of Shanghai, China, advised the Department of State, under date of February 17, 1912, that he expected to arrive in San Francisco on March 14, and that after spending about two weeks in California he would proceed to Madison, Wis. The consul general will later proceed to Washington, D. C., where he may be addressed in care of the Department of State.

ELECTRIC STREET RAILWAYS IN BOHEMIA.

[From Consul Joseph I. Brittain, Prague, Austria; see also Daily Consular and Trade Reports for Feb. 18, 1911.]

The following table shows the names of the various street-railway lines in Bohemia, together with the number of passengers carried and the receipts in 1911, and gains over 1910:

Lines.	Passengers.	Receipts.	Increase over 1910.
Prague.....	54,825,203	\$1,561,831	\$175,673
Aussig.....	3,539,702	75,024	7,165
Brux-Johansdorf.....	1,122,474	39,223	2,944
Budweis.....	654,068	17,445	1,201
Gablonz.....	2,028,413	111,325	1,010
Marienbad.....	520,970	20,378	1,779
Pilsen.....	2,537,141	47,600	4,932
Reichenberg.....	2,647,710	75,018	3,908
Teplitz.....	2,211,825	60,119	2,625

The electric street-car service of Prague was greatly extended during the past year, one line having been built beyond the castle and other attractions on the hill overlooking the city. For 4½ cents tourists may now visit points to which they were formerly obliged to take a carriage at a cost of \$1 to \$2 for each trip. There were 9,315,203 more passengers carried in 1911 than during 1910. On January 1 the fare was increased on all the lines in the city. For short distances it was advanced 17 per cent and for long distances 10 per cent, and monthly tickets at reduced rates were withdrawn. The wages of the employees were not changed. During 1912 the lines will be extended some 9 miles.

The company, which is practically the municipality of Prague, now owns 351 passenger cars, 13 freight cars, 8 snow plows, and one sprinkler. It employs 951 conductors and motormen, 42 switchmen, 76 track cleaners, 543 common laborers, and 56 officials. The cars are not heated during the winter months.

BRITISH COLUMBIA HERRING CATCH SMALL.

[From Consul Abraham E. Smith, Victoria, Canada.]

Under the Canadian regulations the herring season closes March 1. The herring did not commence running till late in the past season, and fishermen were hopeful that the closing date might be postponed, but, as the fish had commenced to spawn, the closing regulations were rigidly enforced, that next season's run might not be impaired.

During 1909-10 the catch at Nanaimo, the headquarters of the herring industry, reached 25,000 tons. A great deal of this found a market in the Orient, where there is always a good demand for British Columbia fish, while a quantity was shipped to the United States, some to eastern Canada, and some to England. During the 1911-12 season, just closed, the packers at Nanaimo shipped for export only about 12,000 tons of herring. No cause has been found for the scarcity of herring in the waters about Nanaimo, although some have advanced the theory that the presence of whales in the vicinity drove the smaller fish into shallow waters.

CONSTRUCTION WORK ABROAD.**SPAIN.**

[From Consul Charles S. Winans, Seville.]

Extension of Water-Supply System.

Plans for increasing Seville's water supply call for filtration and distribution of a large quantity of river water, which will furnish an opening for the sale of large supplies of plumbing and hardware goods.

The present system has long been considered inadequate for the population of over 150,000. It partly includes the ancient Roman open aqueduct which brings the water 9 miles from low hills. The source of supply is pure, but the transmission system is condemned. This water is now used as a supplementary supply for fire protection, and in a few houses, for which the municipality collects a small rental.

The greater part of the water system is controlled by an English company, which for household use has brought a supply by pipe, under pressure, from the hills. The company's water rent is paid by the landlord on the basis of the value of the house, meters not being employed. A residence renting for \$22.50 to \$32.40 per month is charged \$1.80 per month. This potable supply, however, is not available for several hours each day, hence the company proposes installing in every house its river-water system also. The latter is pumped from the Guadalquivir without filtration and sent through 25 miles of city mains for street flushing, etc.

Construction of New Plant.

The English company is about to expend some \$750,000 on the installation of a new waterworks. The water will be brought from the river by gravity to a sand-and-gravel filtration plant, whence it will be forced through the city by pumps; 25 miles additional mains will be laid, the old mains renovated and incorporated with the new filtered water system. Thereafter unfiltered water will not be used.

The proposed plan calls for the maintenance by the English company of two separate systems, and that every house now using its water will probably also install its filtered river-water system, which will furnish for drinking, cooking, and other household purposes water at about half the charge for the potable water.

The new plant will be erected without contract, under the direction of the company's local engineer, although tenders for supplies must be sent to the chief engineer of the Seville waterworks, Mr. F. S. Courtney, 25 Victoria Street, Westminster, London, England, headquarters of the concern. When the contracts between the city and company are duly signed there will be an excellent chance for American firms to furnish pumps, piping, engines, etc. A good market will also doubtless be created at Seville for hardware and plumbing supplies. [A special list of Seville dealers in such goods may be obtained from the Bureau of Manufactures, Washington, D. C.]

ROUMANIA.

[From American Minister John B. Jackson, Bucharest.]

Improvements in the Capital City.

It is announced that the municipality of Bucharest will in a short time expend more than 1,000,000 francs on local improvements. Among other things, a number of public lavatories are to be con-

structed and several watering carts are to be purchased. It is said that negotiations have been begun with a French automobile factory with a view to creating an autobus service. In addition, the construction of a large new city hall (Primaria) is contemplated as soon as funds for the purpose are available.

Construction Work Throughout Roumania.

The construction of modern—if relatively small—hotels and other buildings, public and private, is contemplated in several places in Roumania, and the purchase of furniture and sanitary fittings will be necessary. In the Monitor Oficial for February 28 bids to be presented on March 18 were invited by the Ministry of Justice for the installation of the entire water and sanitary system in the new palace of justice which is to be constructed at Jassy. Comparatively few Roumanian houses have modern sanitary conveniences, and so far as I know there is no agency for American articles of that kind in this country. For the Jassy building alone about 50 water-closets and 30 urinals, as well as a considerable number of stationary wash-stands and other toilet fittings are required, and it seems that it might be to the advantage of American manufacturers to pay some attention to Roumanian needs.

GERMANY.

[From Consul Herman L. Spahr, Breslau, Prussia.]

Construction Work in Breslau District.

Highway.—The contract for constructing a macadamized highway from Riegel to Simsdorf has been awarded to Mildner & Wulf, Jauer, Silesia.

Sawmill.—August Kranz & Soehne, Bunzlau, Silesia, have bought and will rebuild a steam sawmill that was destroyed by fire. The mill will be operated in connection with their lumber yard.

Sugar warehouse.—A sugar factory at Pakosch, Posen (Zuckerfabrik "Union A. G.") is about to build a storehouse for sugar. The contractor is Carl Tuchscherer, Spezialbaugeschaef, Lohestrasse 56, Breslau, II.

Workmen's colony.—At Mikultschuetz, upper Silesia, The Borsig Works will build this year for their workmen a village of 67 houses, a school, and a supply canteen. Address, Die Borsig'sche Verwaltung, Mikultschuetz O/S.

Bakery.—A cooperative bakery is being erected for the Vorschussverein Ohlau at Baumgarten bei Ohlau, Silesia. Also at Cammerau, Kreis Schweidnitz, a new bakery is to be built for Baekermeister Gustav Tamm, Schoenbrunn, Kreis Schweidnitz, Silesia.

TURKEY.

[From Consul General G. Bie Ravndal, Constantinople.]

Plans for Public Works.

Djavid Bey, ex-minister of finance, has been appointed Minister of Public Works. Following is a translation of an interview given by him to a representative of Le Jeune Turc, which paper states that, of all the ministries of the Turkish Government, it is undoubtedly upon that of public works that falls the greatest share in the work of uplifting the Empire.

Plans for Railways—The American Chester Project Still Alive.

My program consists of (1) railroads, (2) ports, (3) irrigations, (4) roads, (5) public works of local interest.

I shall give special attention to the railroad development, which I consider as the most important of public works in hand. I shall endeavor to complete the already existing extension lines, and especially to have railroads penetrate into the regions of Anatolia hitherto not blessed by that powerful agent of economic progress.

The railroad constructions I have in mind could according to my plans be finished within 10 years; I have classified them in the following order: (1) Black Sea line, (2) Adriatic line, (3) Chester Railroad project, (4) Bagdad-Bassorah line, (5) connection of the Angora line with the Samsun-Sivas line.

The construction of the Black Sea lines, which ought to form the railroad system of eastern Anatolia and cover the Vilayets of Trebizond, Bitlis, Van, Erzerum, Sivas, will be intrusted to the "Regie Générale de Chemin de Fer," which has already made the preliminary investigations that will soon be submitted to me. It is this society also which will undertake the construction of the Adriatic or Albanian lines, which it is at present surveying. Corps of engineers are now working near Janina. Five more groups will start in a few days for other points in Albania. The survey of the Karaferia sections has been practically finished.

Regarding the Chester project, it is naturally with its promoters that we shall carry on negotiations.

As to the Bagdad-Bassorah line, I propose to enter into serious negotiations with the British Government to settle once and for all the conflicting interests which the construction of that section of the Bagdad Railroad has created.

Lastly, the construction of the Angora branch of the Samsun-Sivas line will be turned over to the German Anatolian Co.

Thus we shall give our railroad construction an international character, dividing it among the various competing financial bodies in such a way that their rivalry will not hinder the realization of my plans.

The construction of all these lines, during the 10 years that it will last, will involve an annual charge of £T1,500,000 (\$6,600,000). But it can be surmised that, with the receipts of the proposed new lines as they are one by one put in working order and with the increasing receipts of the already existing railroads, this charge of £T1,500,000 will steadily decrease.

This heavy schedule of railroads can be realized if it is only carried out in a methodical way, with the firm determination to carry it through. I indeed hope that with the cooperation of all well wishers and persons following the progress of Turkey with interest, who realize that we must "hustle" to save ourselves, I shall bring the work to which I mean to devote all my energies to a successful close. It will be a great step forward for our country when we shall have laid on a sound basis the foundations of these railroads, which will connect all the Provinces of this Empire.

Harbor and Port Works.

We must not forget that Turkey, owing to her geographic position, is a country called upon to play an important part in the maritime world, and we must therefore set ourselves to perfecting the administration of our ports.

The surveying of the ports of Samsun and Trebizond is actually being conducted by the National Bank of Turkey. On the Black Sea we mean to construct ports at Heraclea and Ineboli. On the Aegean Sea we shall build a large harbor at Dedeagatch, the plans of which are in the hands of the Council of State; also a small port at Cavalla. We can foretell the enlarging of the port of Saloniki, which must be done to meet its ever increasing commerce.

We are also thinking of constructing two ports on the Adriatic Sea, but their positions have not yet been fixed upon; also two ports on the Syrian coast, to be chosen from either Jaffa, Haifa, or Tripoli.

Irrigation Enterprises.

As to irrigating lands, we shall take in hand the regions of Mesopotamia, Adana, of the Bardar, the Boyana, the Maritza, and the Jordon. In a few days we shall lay open the contract for the irrigation of Mesopotamia.

The matter of making the Boyana navigable is considered by all as one having both political and economic importance, and we shall turn our efforts toward it.

Building of Good Roads.

Roads may well be placed side by side with railroads as the powerful means of developing the economic life of our Provinces. I shall hasten the completion of the great general plan for the Empire's roads, which is now being carried on.

We have had to make certain modifications in the contract with the French company, "l'Entreprise Française des Routes." After a lengthy discussion at the opening of my administration, I arrived at a happy conclusion with M. Loucheur, director of the said society, which was satisfactory to the interests of both State and company. Similar amendments were proposed to the German society, which is undertaking the building of the roads in Macedonia.

The French company has completed the survey of an important part of its field. I shall hasten the examination of the plans laid before the ministry. As soon as the weather permits, this society could, working on the territory already surveyed, push its work considerably. We can count on having in construction during the course of the year a good length of road throughout the Provinces.

In four years we shall have in the rough regions of Anatolia 6,000 kilometers (3,728 miles) of roads scientifically built and able to stand the test of time.

In the Provinces there are several minor works of public improvement which ought not to involve a greater expenditure than £T5,000 (\$22,000), and which ought to be attended to by the local authorities.

I have addressed a circular letter to the governors and mutessaris to the effect that they send me detailed accounts of the necessary improvements in the territory under their jurisdiction. I shall make the necessary appropriation for their completion at the beginning of the fiscal year.

TRIPOLI-IN-BARBARY.

[From Consul John Q. Wood, Tripoli, North Africa.]

Construction Work on the New Port.

Since January, two wharves have been constructed at a cost of \$20,000 each, one just east of the customhouse and the other east of the Castle. On account of the lack of facilities for handling the large increase of freight arriving at this port and especially of landing the same, the Government decided to construct these piers of wood; they extend from shore about 400 feet and are about 30 feet wide. Two small landing jetties for passengers have been run out from points to the west of the customhouse and immediately in front of the quarantine station. These improvements have been greatly instrumental in relieving the congested condition of the port, which has become the scene of great activity during the last few months. Now an average of 30 steamers and 20 sailing vessels are daily seen in the harbor, besides the naval boats and some smaller craft engaged in the sponge fisheries. Several tugboats have come here from Italy, and large scows and lighters are employed in the Government service. Gradually apparatus for handling large and bulky freight is arriving, so that it is possible to land over 2,000 tons daily. Steamers are consigned here with coal from England, lumber from Trieste, cattle and grain from Argentina, building materials and merchandise from Hamburg, besides the many arriving from Italy with military supplies and material and machinery for the new railroad being constructed. Already the contract for the first breakwater to be built at the new port of Tripoli has been awarded to an Italian firm at Rome.

The new harbor will have two breakwaters, one running from the Spanish fort along the line indicated by the ledges extending over a mile to the northeast; the other, starting from a point near the Hamadie fort in Sciara Sciat, will run a little to the northwest. When

the work is completed the port will be thoroughly protected from the heavy storms from the northeast and northwest and will make Tripoli one of the safest harbors in the Mediterranean. One part of the port will be reserved for the naval ships. Merchant steamers drawing 30 feet will be unloaded at one of the three docks that will run south from the first-mentioned breakwater; and machinery of the latest models will be installed on the piers, to facilitate loading and unloading. Over 15,000 soundings show the feasibility of dredging the harbor at a reasonable price, and contracts for this work will be awarded later in the year. The stone to be used has been located in a district only $2\frac{1}{2}$ miles from the city, and already the contractor has arrived and begun to construct a railway line to the quarries. The contract price for the first breakwater is 2,600,000 lire (lira = \$0.193), and the successful bidder is well and favorably known as an efficient builder of harbor works. The name of the firm is on file at the Bureau of Manufactures, as well as the names and addresses of contractors and engineers interested in the public improvements now in progress or soon to commence in other places in Tripolitania besides the city of Tripoli.

Railroad Construction.

The most important event in the development of the agricultural and mineral resources of this land took place when the Government decided to construct a railroad to Ain-Zara, about 8 miles south toward the rich grazing hills of Gharian and the olive district, which lies 80 miles inland. All of the soil between the mountain range and the sea should give splendid crops of barley and wheat under intelligent cultivation and provide sufficient freight to make the railroad a paying investment for the State. The line is nearly completed, and two 39-ton locomotives have been landed, while two others are still on steamers in the harbor. An effort was made to disembark the first locomotive, "Tripoli," on February 22, but on account of a miscalculation of the depth of the water it had to be postponed until February 25, when appropriate exercises were held amidst great enthusiasm.

About 150 workmen from Italy, regular employees of the railroad department of the State, have been here for over a month; ordinary laborers are receiving 7 francs per day, and section bosses 12 francs, while in Italy they receive, respectively, one-half those wages. The ordinary Arab and Negro laborer of Tripoli is earning $2\frac{1}{2}$ francs per day, while last year at this time he was glad to receive $\frac{1}{2}$ franc per day when he could find work. The line has the standard colonial gauge, 95 centimeters (a fraction over 3 feet), and a steel rail is being used, commonly spoken of as a 27-kilo rail (being the weight of 1 meter). All of the rolling stock is of Italian manufacture except the locomotives, which come from Berlin. No passenger cars have yet arrived.

STRAITS SETTLEMENTS.

[From Vice Consul General D. Milton Figart, Singapore.]

New Sewer System.

Information has been received that the plans for the new Singapore sewer system are nearing completion and that the project will probably be thrown open to bids by May, 1912.

CANADA.

[Press clipping, from Consul Fred C. Slater, Sarnia, Ontario.]

February Building Permits.

Canadian building permits in cities for February, with the advantage of one extra day, show 185.6 per cent increase over February, 1911. Port Arthur is in first place, showing a 2,465.2 per cent gain. The largest actual gain is reported from Victoria, \$1,488,130, two-thirds of the total being for additions to legislative buildings there. Even with this amount deducted, Victoria would show a 166.8 per cent increase over last year. Calgary, Toronto, and Winnipeg follow in the order mentioned.

[From Montreal Gazette.]

Construction of New Line to Toronto.

One of the most important contracts let by the Canadian Pacific for years is that with the Toronto Construction Co. for building the new Lake short route to Toronto, at a figure approximating \$12,000,000, or about \$64,865 a mile. Work has already been started on this big job, which comprises 185 miles of track, and it is arranged that the line shall be turned over ready for operation within two years.

This line is the practical outcome of the necessity for double-tracking the Canadian Pacific Railway between Montreal and Toronto. But the original line runs through a country which is not only immensely expensive from a construction and operating point of view, but is not particularly rich in furnishing either through or local traffic. The new line will branch from the present main line at Glen Tay, 15 miles west of Smiths Falls, and run southwest to the lake shore, tapping such business centers as Belleville, Trenton, Cobourg, Oshawa, Port Hope, and all the leading towns along the lake, rejoining the main line at Agincourt for entry into Toronto.

THE TEA TRADE SITUATION.

[From the London Financial Times.]

In any computation of the world's tea production difficulty is encountered through the fact that where the figures for Ceylon, Java, and Japan are compiled for years ending December 31, those for India and China are for a "season" that ends three or four months later; consequently, while exact figures for the first three sources can be ascertained, those for the last two must be estimated. This can be done, however, with some precision, and with the following results for the current season: Ceylon, calendar year 1911, 188,000,000 pounds; Java, calendar year 1911, 50,000,000 pounds; Japan, calendar year 1911, 43,000,000 pounds; India, season 1911-12, 268,000,000 pounds; China and Formosa, 1911-12, 143,000,000 pounds; Natal, etc., 3,000,000 pounds; total, 695,000,000 pounds.

Brick Tea—Consumption No Longer Exceeds Supply.

This total is an increase of about 35,000,000 pounds upon that offered for sale in the previous season, and it does not include the brick tea made in Hankow and other factories for Asiatic trade. This reached 86,000,000 pounds in 1910, but to what extent it has been reduced by the disturbances at the end of 1911 is not yet known. It is a business apart from what is understood as "the tea trade," although not without influence upon it, since the manufacturers have taken to buying about 15 per cent of their materials outside China.

How near to this total of 695,000,000 pounds does the world's consumption approach? A decisive answer can not be given. The records of imports are so carefully kept and progress so regularly in the United Kingdom, Australasia, and Canada that the annual consumption there can be closely calculated; but in some countries the imports vary so much from year to year that consumption has to be estimated from the average of several years' trade, while from others no reliable statistics are obtainable. From such statistical records as exist it is difficult to account for even as much as 665,000,000 pounds annually. Two explanations of this discrepancy are offered: First, that a large quantity of tea is used in countries from which no returns are obtainable; secondly, that traders hold large supplies in reserve. Be that as it may, prudence requires recognition of the fact that quite as much tea as is needed is being produced; that stocks which had fallen too low are being replenished; consequently, that it can no longer be said that consumption has outstripped supply.

The Result of High Prices—Java's Rise.

The position reached is the natural outcome of the high price paid for the commonest tea during the last 18 months. This has stimulated larger purchases of it from China;

it has encouraged some of the growers elsewhere to pack any sort of leaf, stalk, siftings, or dust that will sell; it has discouraged those who might have made better crops if there had been inducement; and it has lowered the standard of quality used almost everywhere. This will not be good either for producers or for consumers in the long run.

Java's rapid growth as a tea-producing center is attested by the fact that while the total exports from that island in 1909 amounted to 34,767,200 pounds, in 1911 shipments advanced to 50,361,000 pounds, 22,649,000 pounds of which went to the Netherlands and 15,501,000 pounds to the United Kingdom. About 90 per cent of Japan's exports goes to the United States, where Japanese tea is still in request. The declared value of the green tea was at the rate of 13½ cents per pound, and the quantity taken shows that it is able to avoid the prohibition of "faced," or artificially colored, tea in the States. The black tea's value was 13 cents per pound, and of the dust the average was only 3½ cents per pound, confirming what was said some time ago about this being imported, not for use, but probably for the manufacture of caffeine.

American Imports of Tea.

The variations in American purchases of tea and the advance made by Japan, with a gain of 29,304,052 pounds while China lost 32,411,635 pounds of this trade, can be seen from the following table of tea imports into the United States during certain of the last 18 years:

Years.	From China.	From Japan.	From all countries.	Value.	Average per pound.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>		
1894	50,405,188	37,980,937	93,518,717	\$14,144,243	\$0.151
1895	54,700,393	36,941,394	97,253,458	13,171,379	.135
1900	42,283,189	33,949,350	84,845,107	10,558,110	.124
1904	53,157,332	42,700,127	112,905,541	18,229,310	.161
1905	43,122,798	41,970,050	102,706,599	16,230,858	.158
1906	37,466,719	37,812,684	93,621,750	14,580,873	.175
1907	31,231,259	37,411,653	86,368,490	13,915,544	.161
1908	27,293,278	46,944,430	94,149,564	16,309,870	.173
1909	33,633,377	44,072,162	104,484,550	16,553,082	.158
1910	24,394,663	50,124,392	98,108,339	16,631,486	.169
1911	17,993,553	57,284,989	104,165,654	18,317,171	.176

HUNGARIAN GOVERNMENT SUPPLIES.

[From Consul General Paul Nash, Budapest.]

Hungarian law requires that all articles used by the Government, by State institutions, railways, industries, etc., and by industrial or other companies subsidized by the State shall be of Hungarian manufacture, except when it can be shown that an article needed is not made in this country or is not procurable here in a suitable quality and at a reasonable price. The Minister of Commerce has the power to grant exceptions in certain cases even when an article is obtainable here, but this power is no doubt provided as a means to avoid excessive prices being charged for articles furnished to the Government. The Minister of Commerce has recently issued a decree giving a list of articles which may be purchased from foreign manufacturers by the State, public institutions, etc., without a special permit from the ministry, as follows:

Stitching machines, ammeters (except those used for instructional purposes in schools), gum arabic, awl punches, asbestos, velvet, thread buttons, shoe buttons, shoe machinery, stone buttons, alarm clocks, wall paper, graphite crucibles, rubber mattresses, hair clippers, violin strings, knitting needles, typewriters and parts, carbons for arc lamps, calorimeters, rubber stamps for hand use, barometers, lithographic stone, tracing cloth, meter measures capable of being wound or folded, microscopes (except those used in schools), tracing paper in rolls, minium paint, printing stone, scissors, clocks, watch glasses, pumice stone, slates, slate pencils, planimeters, platinum articles used in laboratories, polymeters, tinfoil paper, saddlers' needles, sponges, glass beads, fountain pens, sewing-machine needles, voltmeters (but not for school demonstration).

INTERNATIONAL EXPOSITION AT GHENT.

[From Consul General Henry W. Diederich, Antwerp, supplementing report in Daily Consular and Trade Reports for Feb. 24, 1912.]

The exposition at Ghent will cover 260 acres, and it is already expected that the limits will have to be extended to find room for exhibitors. The Salle des Fêtes will be in the Park of Courtrai, and alone will cover 8½ acres. It will be constructed of substantial material and remain as a permanent memorial.

The opening event on April 27 will be an exhibition of flowers on a grand scale, covering 70,000 square feet. What may be expected can be well imagined when it is remembered that Ghent is probably the greatest center in the world for flower exportations.

The buildings are already in an advanced stage of completion. For encouraging exhibitors to be ready in time, the committee has resolved to allow 25 per cent reduction on the rent of space to all whose stands and exhibits will be completely finished on the opening day. The rates for space in the industrial hall are 50 francs (\$9.65) per square meter, with an additional 45 francs (\$8.68) or 25 francs (\$4.82) per running meter (3.28 feet) along the façades. The rate for stands or pavilions in the gardens will be 25 francs per running meter with a depth of less than 1 meter, or 25 francs per square meter for over 1 meter depth. The entire world's fair at Ghent will be divided into 22 large groups, a detailed description of which is given in the catalogue just issued. The exposition may be continued till November 15, 1912.

American Night Industrial Schools.

What sort of bread-and-butter efficiency training does the educational system of this country offer the young workman who wants to better himself by going to an industrial school out of shop hours? This question is touched on by Charles R. Richards, director of Cooper Union for the advancement of science and art, New York City, in a publication just issued for free distribution by the United States Bureau of Education, Washington, D. C. Mr. Richards finds that just now evening schools have the most pupils of this sort, but points out the advantages which would accrue if America should follow the example of Germany in allowing workmen to get off in the daytime without having their wages docked, in order to raise their efficiency by attendance at an industrial school.

Other types of schools which occupy important places in industrial training in this country are the intermediate industrial or preparatory trade schools, the trade school, the evening school, the part-time school, and the corporation or apprentice school. These are also discussed. Dr. Richards finds that the economic factors involved in the conduct of these schools are of two kinds: First, the cost to the community of running the schools; and, second, the cost to the pupils of attending the schools.

Canadian Government Aid to Railways.

The Canadian Government is stated to have submitted to Parliament proposals to renew or grant subsidies in aid of railway and bridge construction to the amount of nearly \$23,000,000.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8462. Cement works.**—An American consular officer has forwarded a communication from a business man in his district in which he expresses a desire to interest Americans in the erection of cement works in a territory containing a vast amount of cement stone of the first quality, of which he holds the right of exploitation. He writes that he will gladly furnish to interested persons or firms more details, as well as samples, photographs, etc.
- No. 8463. Hand corn grinders.**—A business man in a European country informs an American consular officer that he is interested in the possible purchase of American hand corn grinders. The inquirer has received a number of propositions from manufacturers of milling machinery intended for large establishments, but he is not interested in devices of this character at present. He desires to import hand corn grinders for the preparation of stock feed.
- No. 8464. Machinery of various kinds.**—An American consul in the United Kingdom has received an inquiry from a merchant in his district in which he states that he would like to get in touch with manufacturers in the United States of the following machinery: Revolving and oscillating air-heated pans used for coating pills and other chemists' goods, and machinery for cracking nuts, almonds, and apricot stones. He writes that he has orders on hand from the colonies, and is anxious to get in touch with good houses at the earliest possible moment.
- No. 8465. Street-cleaning machinery.**—A commission representing a foreign municipality has recently been investigating the subject of mechanically-driven vehicles for street cleaning and has studied the systems in use in other cities. As a result of its investigations it has recommended that a sum be included in next year's estimates for the purchase of five machines, of a type to be approved after the results of various trials have been ascertained. As this may be an opportunity for American manufacturers of mechanically driven street cleaners, it might be to their advantage to communicate with the superintendent of street cleaning in the city in question.
- No. 8466. Turkish raw silk.**—An American consul in the Levant furnishes the name of a prominent exporter of Broussa silk who wishes to establish relations with American importers of this article.
- No. 8467. Tombak plate.**—An American consular officer in Germany reports that a firm in his district is in the market for 3,000 kilos (6,613 pounds) of Tombak plate (Tombakblech). He furnishes references. Prices should be quoted f. o. b. certain cities. Correspondence, which should be in German, should be addressed direct to the firm referred to.
- No. 8468. Rosin and benzine.**—A business firm in a European country wishes to purchase rosin for soap-making purposes in lots of about 50 tons. The firm also wishes to purchase benzine for domestic purposes in lots of 50 tons. Exceptional bank references are furnished, and correspondence may be in English. The consular officer furnishing this information also states that the firm is a large purchaser of glucose and other materials from American firms.
- No. 8469. Cottonseed oil, tallow, lard, and corn oil.**—A business man in Germany informs an American consular officer that he is desirous of representing American manufacturers of cottonseed oil, tallow, lard, and corn oil in that country. He furnishes references. Correspondence, which may be in English, German, or French, should be directed to the inquirer. If necessary, he would be willing to visit the United States to make the necessary connections.
- No. 8470. Automobile agency.**—An American engineer, who has been connected with various manufacturing concerns in Europe for the past 15 years, the last 4 of which he has been with an automobile company, would like to secure an agency for an American automobile. He informs an American consul that he will gladly furnish references.

- No. 8471. Copper exchange.**—Consul James E. Dunning, of Havre, France, reports the creation of a copper exchange in that city to take the place of the indirect buying through London where the French have heretofore had to deal. Latham & Co., of Havre, an influential house with American bank connections, would like to hear direct from Americans interested and can give any required assurances as to responsibility.
- No. 8472. Rubber stockings and bandages.**—An American consular officer in Germany reports that a business firm in his district would like to get in touch with American manufacturers and exporters of first-class rubber abdominal bandages, rubber stockings, and bandages.
- No. 8473. Machine for cutting bristles and fibers.**—The publishers of a trade journal in the United Kingdom have written to an American consulate that they would like to secure the name of the manufacturer of a brush makers' machine for cutting bristles and fibers, fitted with a steel circular knife, which it is believed is produced in the United States.
- No. 8474. Plumbing goods and sanitary supplies.**—The plumbers in a European city are in the market for plumbing goods and sanitary supplies, for which there will be a large demand upon the completion, the coming summer, of the new water-works system now being constructed to bring water for domestic uses into the city. An American consul writes there are no wholesale dealers in such goods, but furnishes a list of the leading plumbers with whom it would be advisable for American firms to correspond.
- No. 8475. Agricultural implements.**—A business firm in the West Indies, having offices in a number of cities, informs an American consular officer that it is desirous of receiving a proposition for granting an exclusive agency for the selling of agricultural implements, such as plows, harrows, cultivators, planters, etc., from some manufacturing concern that would be willing to provide for demonstrating and consignment of stock and such other needs as the situation demands, and through which a market may be created and sales made.
- No. 8476. Incubators and poultry supplies.**—An American consul in France is in receipt of an inquiry from a person who is about to engage in chicken raising on a large scale in his district for catalogues, with export price lists, of high-class and thoroughly reliable incubators taking at least 300 eggs. This information is desired at the earliest possible moment, and the information, which should also cover general poultry farm supplies, would best be sent direct to the consulate where it will receive careful attention.
- No. 8477. Silk goods.**—An American consular officer, in a European country has received an inquiry from a business firm in his district for the names of the American manufacturers of silk goods known as the "Sun-ray silk," sample of which accompanied the report and will be loaned by the Bureau of Manufactures. This firm desires to deal direct with the manufacturers of this article.
- No. 8478. Catalogues for consulate.**—American manufacturers are requested to renew their catalogues which have been filed in the American consulate general's office, Singapore, Straits Settlements. It is stated that many of these catalogues are not up to date. Interest is being aroused in these files, and concrete results in the shape of orders to American manufacturers have already been obtained.
- No. 8479. Paper towels.**—A firm of direct importers and sole agents for certain lines of paper goods in the United Kingdom informs an American consular officer that it would like to secure the names of American manufacturers of paper towels, such as are perforated and prepared in rolls.
- No. 8480. Olive oil.**—An American consul reports that an exporter in a Mediterranean country who has been engaged in the olive-oil trade for many years desires to establish relations with some American firm to represent him as agent in this line. Correspondence should be in French.
- No. 8481. Foodstuffs and fancy groceries.**—A British firm of merchants and commission agents has indicated to an American consular officer its desire of securing additional agencies for American foodstuffs of all kinds. This firm specializes in American fancy groceries.

WOOL SALES POSTPONED BY COAL STRIKE.

[From Consul Augustus E. Ingram, Bradford, England.]

The British coal strike has caused a considerable number of Bradford mills and workshops to resort to short time, not only in order to economize the coal supplies but also to mitigate the effects of decreased employment by spreading it over an extended period.

One of the most noticeable evidences of the coal strike has been seen in the congested condition of the Bradford conditioning house. Merchants are reluctant to transfer their wool and other goods to the railways, as the companies will not accept any responsibility for delay in transit of traffic, train service being greatly curtailed, and all merchandise is accepted by them at the sender's risk.

The postponement of the London wool sales, which should have opened on March 5; is an event almost without precedent, but no other course was possible as the wool after purchase might have lain indefinitely in London. The London selling brokers' committee now definitely announce that the next series of sales will begin on April 11, the list of arrivals closing when 250,000 bales are reported. The date of the third series of wool sales is changed to June 11 (instead of April 30), the quantity limit, if any, to be fixed later. As to any alteration in dates for the remaining series of the year, nothing has yet been decided.

Prices in the Bradford wool market remain remarkably firm, and it is an indication of the inherent strength of the market that the national coal strike has so far failed to depress prices. Apparently, demand keeps up fully with supply.

UNIFORMS FOR ITALIAN ARMY.

[From Consul Chapman Coleman, Rome.]

In response to requests for information concerning the goods intended to be used as uniform material for the Italian army, I have, after investigation, to report as follows:

The Italian Government has adopted, and to some extent already introduced, for the army uniform (for soldiers, not for officers) the materials of which samples are forwarded [and will be loaned by the Bureau of Manufactures]. On these samples the prices paid by the Government are noted, as are also the seasons, summer or winter, for which their use is intended. The Italian Government does not contemplate the use of khaki for uniforms.

Knapsacks are covered with the furred skins of goats, or other animals, canteens are of wood, and coverings of cloth are not used for either.

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.



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FAR EASTERN SHIPPING SITUATION.

[From Consul General George E. Anderson, Hongkong, Feb. 14, 1912.]

The developments in the shipping world of the Far East during 1911 were altogether in the direction of improvement. Freight rates were raised—along the coast during the year and with the United States, Europe, and the rest of the world at the season's close—but service was increased and improved as well, and in spite of the 10 per cent advance in freights shippers seem to be better satisfied with the situation.

The agitation for improved pay and bettered conditions for officers and men employed in the shipping of the Far East was expected to increase the cost of freights, and the low margin of profit for owners under the best conditions also demanded consideration. That the advance has been no greater under the circumstances is taken as a careful balancing of interests, which indicates permanence and is satisfactory.

The improved services to be noted consist not only of more regular steamship lines but in the greater size, speed, and general effectiveness of the vessels employed. During the past year or at the beginning of the present year, new services have been established between Hongkong and various portions of the Far East on the one hand, and the United States, Denmark and other north European countries, Austria and other south European countries, India, the East Indies, Australia, the South Seas, and South Africa.

Effect on American Trade—Japanese Subsidies.

This extension has naturally affected services to and from the United States in that it has afforded increased distributing power for Hongkong in its relation to American trade. Nearly all regular passenger lines have augmented their facilities by putting on newer and larger vessels. Along the coast conditions have so improved that some of the coasting companies have paid dividends for the first time in several years.

The shipping situation in the Far East continues to be dominated by the Japanese. The policy of reorganization of subsidies, of con-

solidating and improving services, and at the same time of extending services in new lines has been followed successfully. Details of the amounts to be paid to the subsidized lines just issued by the Department for Communications at Tokyo, have received the interested scrutiny of marine circles of the Far East as a dominating factor in the situation. The total amount in round figures is \$5,451,400, a decrease from the previous fiscal year of \$19,100.

The lines receiving subsidies and the amounts thereof are as follows, at exchange of 2 yen to the dollar: European, \$1,598,730; North American, \$2,223,642; South American, \$364,958; Australian, \$212,891; southern Pacific, \$37,500; Yangtze, etc., \$380,000; Kobe-Dairen, \$50,000; Yokohama-Shanghai, \$137,500; Kobe-North China, \$65,000; Vladivostok, \$12,500; Hondo-Hokkaido, \$25,000; China-Chosen (Korea), \$6,250; Tsuruga-Vladivostok, \$157,500; Special subsidies, \$25,000. The list given does not include subsidies for new lines. It is significant that the increases are for improving foreign lines already established.

Many New Vessels.

The chief improvements contemplated by existing lines are those of the Nippon Yusen Kaisha. This company has under construction five new ships for the lines to Europe and to the United States, and it is now announced that two of these vessels are to be put into service in the course of the next few weeks between Hongkong and Seattle. The new steamers are the *Yokohama Maru*, building at Nagasaki, and the *Shidzuoka Maru*, under construction at Kobe. The *Yokohama Maru* will replace the *Tamba Maru* sailing from Japan about June 1. The *Shidzuoka Maru* will replace the *Inaba Maru* later in the summer. It is understood that the *Tamba Maru* and the *Inaba Maru* will be employed on one of the Indian routes. The new vessels have a gross tonnage of 6,200, a length of 400 feet, breadth molded of 50 feet, and depth molded of 30 feet. They have been constructed to carry 28 saloon passengers and 350 in the steerage. The propelling machinery consists of two sets of triple-expansion engines supplied by steam from double-ended marine boilers, and their contract speed is to be a mean 15 knots.

It is also announced that the company has ordered from the Mitsu Bishi shipbuilding yard a steamer of 15,000 tons to be placed on the European run, which vessel is expected to be completed in August, 1913, and one of 6,500 tons, to be allotted to the American line and to be completed in June of next year. From the Kawasaki shipbuilding yard has been ordered a steamer of 15,000 tons for the European line to be completed in October, 1913, one of 6,500 tons for the American line to be completed in November, 1913, and one of 3,500 tons for the Shanghai line to be completed in the same month. The company has also ordered from a British shipbuilding yard a 3,500-ton steamer for the Shanghai run, to be completed in May, 1913.

The construction of so many vessels is understood to have regard for the extension of the company's business to the east coast of North and South America through the Panama Canal. It is the announced intention to run steamers to New York and Brazil, and the company is now making preparations for a Yokohama-New York service for which it is considered that 11 steamers of 8,000 to 10,000 tons will be needed. In the meanwhile its new vessels and improved equip-

ment will afford a fortnightly schedule from Hongkong to Seattle. It has not yet been decided whether Manila will be a regular port of call for steamers of the line.

Other Extensions of Service.

The extension of the service of Japanese vessels in other directions continues. During the past year the Nippon Yusen Kaisha established a service between Japan and Calcutta by way of Hongkong, improvements in which are promised. The Japanese Government has decided to start a new monthly service from Kobe to Hongkong, Singapore, Saigon, Java, and Sumatra, using three steamers, and has also arranged for a subsidized line from Japan to the South Seas by way of Hongkong commencing with the fiscal year in April. For this latter service provision is made for a subsidy of \$37,500 for the fiscal year 1912-13, \$75,000 annually for the following two years, and \$37,500 for the fourth year. The service is to consist of two steamers, each over 20,000 tons gross, and with not less than 10 knots speed, not less than 12 voyages a year, with the ports of call and the freight and passenger rates to be controlled by the Government. The company has been organized in Osaka and is known as the Nanyo Kisen Kaisha, or South Sea Steamship Co.

There has been a notable advancement in the connection of Hongkong with other parts of the world through steamers other than Japanese. The Austrian Lloyd has just inaugurated a fast monthly schedule between Shanghai and Trieste by way of Hongkong, Singapore, Colombo, and thence to Suez, in addition to the service it has had by way of Bombay. The vessels are of about 8,000 tons burden, are finely equipped and modern in every way, and make the trip from Hongkong to Trieste in 30 days, with railway connections taking passengers from Trieste to London in 39 hours. The Rickmer's Line, including an equipment of 15 steamers, with headquarters at Bremerhaven, is extending its service to Japan and North China by way of Hongkong. The British India Steamship Co. has established a new service of modern passenger boats between Rangoon and Japan by way of Hongkong. The Indra Line, trading between New York and the Far East, is putting on new steamers like the *Indraghiri*, recently launched at Glasgow, which will carry about 9,000 tons dead weight and is provided with refrigerating installation for the transport of provisions. These steamers will also carry a limited number of passengers.

Improved Connections with United States—Oil Fuel.

Connections with the United States by way of the Pacific are improving in the character of ships and general service given. In addition to the better service of finer ships of the Nippon Yusen Kaisha above noted and the new ship of the Toyo Kisen Kaisha announcement is made that the Pacific Mail Steamship Co., the American line, is constructing four new boats not only to increase its facilities on the Pacific but also to inaugurate a fine new passenger and freight service between New York and San Francisco by way of the Panama Canal and in connection with its line to the Far East with Hongkong as the terminus. It is announced that these ships will be 680 feet long and 75 feet beam, will carry 300 first-cabin and 200 second-class and 300 third-class passengers, and will be able to make 17 knots per hour and to handle 17,000 tons of

freight. The Canadian Pacific Line also is completing two new 15,000-ton ships which will be put into use a year hence, after which time the company will maintain a fortnightly schedule between Vancouver and Hongkong by way of Japanese and Chinese ports. The present mail contract of the company, which will be revised when the new boats are put into commission, provides for a subsidy or mail subvention of about \$73,000 per year for a monthly service.

It is a notable fact that the new steamers of the Canadian Pacific, the Pacific Mail, and some other lines are provided with oil burners. For some time past the Toyo Kisen Kaisha has been experimenting with the *Shinyo Maru* as to the comparative cost and other merits of oil fuel and coal. Similar experiments on the part of the Canadian Pacific Co. in its coast service have resulted in reports favoring oil.

Manila a Rising Port of Call—Panama Canal.

One feature of recent shipping changes in Hongkong is the increasing number of vessels for both Europe and the Pacific coast which call at Manila. Most of the mail steamers for Europe now call there on their way to Europe, and the steamers of the Toyo Kisen Kaisha for the Pacific coast and other lines, such as the Bank Line, now make Manila regularly. There is increasing transshipment of cargoes from Europe and the United States at Manila for Japan and North China, which also is significant, and the island authorities are giving attention to the matter of facilities for this transshipment business.

The overshadowing fact in the entire situation is the approaching opening of the Panama Canal. All steamship lines trading to or in the Pacific Ocean are improving their service, are building more and faster steamers, and are arranging their agencies and supply depots with the canal in mind; and it is becoming more and more evident in a practical way that, while trade in this part of the world is not that first to be considered and is not trade in which much has been expected from the canal, that waterway is profoundly to affect and eventually to revolutionize most oriental business, with the United States at least.

[Previous articles by Consul General Anderson on Far Eastern shipping have appeared in Daily Consular and Trade Reports for Dec. 5, 1910; Mar. 15, May 15, June 24, Aug. 12, and Oct. 28, 1911.]

AMERICAN TEXTILE CONVENTION.

The American Cotton Manufacturers' Association will hold its annual convention in Washington, D. C., April 2, 3, and 4, 1912. Among the addresses to be delivered will be one by Hon. Charles Nagel, Secretary of Commerce and Labor. The Bureau of Manufactures will exhibit samples of cotton goods from many foreign countries. These samples have been gathered by the department's commercial agents and by American consular officers, and represent the grades and styles of fabrics in greatest demand in countries which afford an opening for the sale of American woven goods.

Portland cement production in the world is now said to be 25,000,000 tons.

DRIED FISH FOR EUROPE.

[From Consul Horace Lee Washington, Liverpool, England.]

American firms seeking information as to a possible market in Liverpool for dried fish are advised that the only dried fish likely to appeal to the trade is the small cod, weighing about 1 pound and realizing \$98 to \$107 per ton, including containers. This fish is handled packed in barrels containing up to 4 hundredweight (448 pounds) and arrives principally from Newfoundland. The larger cod, of which an abundant quantity is caught by trawlers from the coasts of Scotland, Ireland, and Iceland, comes into this section and when dried is exported to other countries, the United States included.

Six wholesale Liverpool firms, however [whose names may be obtained from the Bureau of Manufactures], state that they will be pleased to receive samples and prices of dried fish from American exporters. They would require this information before being able to express an opinion as to the possibilities of a market. In the opinion of the trade here, the great markets for dried fish are Spain, Portugal, and Greece.

With regard to the market for lobsters, it is the opinion of the six firms that were interviewed that unless lobsters are imported alive into this country there would be no demand for them, as the purchasers prefer to boil them alive, and thus be assured of their freshness. It may be stated that the experiment has several times been made of importing lobsters alive from Canada, but the consulate has been informed that these experiments were not successful, as a large number died on the way. The supplies of lobsters for this district come from Scotland and Ireland, and are landed in Liverpool alive each morning. The prices range from 16 cents to 36 cents, according to the season and the demand.

[From Consul General A. M. Thackara, Berlin, Germany.]

Market for Smoked Salmon.

Preserved salmon is imported into Germany in large quantities, as is shown in the following figures, which give Germany's import and export of that product in metric tons (2,204.6 pounds) during the years 1910 and 1911, not including fresh salmon:

	1910	1911		1910	1911
Total imports..... tons..	4,227	4,549	Total exports..... tons..	55	61
From Denmark.....do..	168	142	To France.....do..	7	6
From Russia.....do..	.1	102	To Austria-Hungary.....do..		
From United States.....do..	4,047	4,291	Value of exports.....	19	32
Value of imports.....	\$1,609,832	\$1,732,402		\$32,606	\$39,270

The above statistics do not separate the salmon in tins from other prepared salmon.

At one of the large grocery stores of Berlin, Read's red salmon in oil is retailed for 2.50 marks (59½ cents) per avoirdupois pound. Smoked salmon in tins put up in Germany is sold for 1.40 marks (33½ cents) a half kilo (1.1 pound) and ordinary smoked salmon retails for 2 marks (47.6 cents) per half kilo.

[A special list of Berlin dealers in smoked fish may be secured from the Bureau of Manufactures.]

GERMAN DEVELOPMENT OF THE HYDRAULIC RAM.

[From Consul General Robert P. Skinner, Hamburg.]

An interesting hydraulic plant was put in operation at Hull-an-Oste in the district of Stade in October last, a plant operated by the ebbing and flowing of the tide, the purpose of which is to drain about 1,360 acres of marsh lands which lie $2\frac{1}{2}$ to 3 feet below sea level.

Obviously any contrivance capable of recovering lands of this type, which are so characteristic of the northern plain of Germany and particularly of Schleswig-Holstein, renders an immense service. The plant at Hull has given such good results that a similar project, considered three years ago by the Government of Oldenburg and subsequently abandoned after the expenditure of a large amount of money, has been planned anew, and it is announced that building operations will begin very shortly. These projects should not be confused with others having to do with the control of tidal energy, to which some newspaper attention has been given recently in this country and which are alleged to be of doubtful importance.

Hydropulsor Installations.

By means of a device denominated the hydropulsor, the flowing tide, against which the shore line at Hull is protected by dikes, passes through a mechanism which, being set in motion, lifts an equal volume of landlocked water and delivers it in a reservoir, where it is impounded until the tide ebbs. At this point the hydropulsor automatically ceases to operate, and the accumulation of water in the reservoir drains out into the sea, the process repeating itself at an annual cost stated to be 75 cents per hectare (2.47 acres) as against \$2 to \$3 for the same drainage operations were they undertaken by steam power. These costs contemplate operation, interest, and amortization. The Prussian Minister of Agriculture was so interested in the initial enterprise at Hull that he procured \$10,000 from the Government to assure the carrying out of the plan.

An earlier and smaller plant is in operation on the Rittergut of Dretzel, in the Province of Saxony, where the natural drainage is insufficient and the land of little value. Drainage by suction pumps had failed utterly and the hydropulsor was mounted in a well already in existence and which was in connection with a conduit leading to the main drainage ditch. The lift of the hydropulsor in this case is $3\frac{1}{4}$ to 4 feet, and the hourly output of drainage water taken up from the wet ground amounts to 98 cubic yards, for which 156 yards of power water are necessary. This drainage plant cost \$625, and the proprietor is said to be entirely satisfied with the results.

Experimental plants may be seen also in the technical high school at Charlottenburg, in the city of Berlin, and at the works of the builders of the machinery, the Ottensener Eisenwerk, A. G., at Altona-Hamburg.

An Improved Form of Montgolfier's Invention.

The successful operation of the Hull plant seems to demonstrate that the project of lifting water beyond its own level has passed its purely experimental phases. The central idea, that of securing cheap and efficient drainage, is quite apart from the often-discussed idea of winning electrical energy from the changing tides, although this result, under certain circumstances, is attained with the hydropulsor.

The construction of the plant at Hull was made possible by the development of the original invention of the "water ram" by Joseph Michel Montgolfier. Montgolfier's ram consisted of a tank to contain the power water, a conduit, two automatic valves, and a delivery conduit with delivery air vessel. The water, being let out of the tank, is bound to escape through the cut-off valve, whereby a gradual acceleration in the current takes place until the accelerating velocity causes the cut-off valve to close of itself. When the escape is suddenly stopped, the entire water mass being still in motion, the recoil produced is called the water hammer.

The original ram of Montgolfier was serviceable only for small volumes of water, as the repeated action of the water hammer strained the machine, and especially when the diameter of the valves exceeded 1½ inches. An improvement on Montgolfier's apparatus was brought out recently by Adolf Abraham, a German surveyor of public works, who, instead of battering or hammering valves, provided a revolving valve that brings the power water in regular turns in connection with the discharge conduits. This device is called the hydropulsor. When the entering or power water has reached its utmost velocity of flow the revolving valve makes a turn, thus bringing the impulse of the power water to bear on the water standing in the discharge conduit, lifting it beyond its level and causing it to overflow at the orifice. Owing to the work thus performed the pressure at the intake subsides, thus causing the revolving valve to make another turn, whereupon the pressure water flows in a second time, accomplishing a new acceleration and a repetition of the former processes, which is renewed indefinitely.

Possible Usefulness on the Panama Canal.

It is claimed that the hydropulsor is capable of delivering the largest volumes of water, the only limits being those imposed by the manufacturers of machine parts. Indeed, plans have been worked out for a plant at Muenden, on the Weser River, to accommodate a flow of 54 cubic meters (14,265 gallons) of water.

In his lecture before the Union of German Engineers of the State of Hamburg, Dr. F. C. Schulz stated that the new device was intended to perform the work which only a combination of hydraulic machinery and a pumping station otherwise could accomplish and where there was an extremely limited fall of water such as would not justify the erection of a power plant with the ordinary hydraulic machinery. The invention is one, therefore, which should be of practical value in the utilization of innumerable rivers where the fall is slight.

Another application of the hydropulsor might be made on locked waterways, the inflow of which must be carefully husbanded. By passing the water discharging from the locks through the hydropulsor, the very force of the flow would enable the same amount of water to be lifted above the high level of the lock water and poured back to replace the amount lost. If, for example, a shortage of water should be encountered upon the opening of the Panama Canal for traffic, it would be possible, conceding the claims of the German inventors to be demonstrated at Hull, to render the canal independent of the reservoir system for the retention of water during the dry season by the installation of a sufficient equipment of hydropulsors.

OZOCERITE AND CERESIN.

[From Consul General Charles Denby, Vienna, Austria.]

Ozocerite was exported from Austria in 1910 to the amount of 25,540 centners [the metric centner, or quintal, is equivalent to 220.46 pounds], worth about \$700,000. Of these shipments, 22,500 centners went to Germany, 1,475 to France, and 536 to the United States. There was in the same year an import of 160 centners, valued in the customs returns at about \$4,000, of which 101 centners came from Asiatic Russia, the remainder being reimports.

Ceresin was exported in 1910 to the extent of 11,637 centners, valued at about \$310,000, chiefly to Germany (3,192 centners), Italy (1,248 centners), Spain (1,061 centners), and 471 centners to the United States. The imports of ceresin into Austria in 1910 were 188 centners, of which 11 centners were from Brazil, the balance being reimports from Germany.

Consular records show a declared value of \$312,309 for the shipments of ozocerite and ceresin that were invoiced through the American consulates in Vienna, Prague, Reichenberg, Carlsbad, and Trieste during 1910.

[Compiled in the Bureau of Manufactures.]

Appearance and Uses.

Ozocerite, or native paraffin, is described in a standard reference work as "a yellow, brown, and sometimes green, waxlike substance, originally found in Moldavia and Austrian Galicia and more recently in Emery and Uinta Counties, Utah, where it occurs in the form of small veins in Tertiary rocks. It consists chiefly of a mixture of hydrocarbons, is greasy to the touch, and melts between 56° and 63° C. (132.8° and 145.4° F.). It finds some use in the manufacture of candles as an adulterant of or substitute for beeswax and in the concoction of ointments and pomades. A residual product obtained in purifying ozocerite, having a hard waxy nature, is combined with india rubber and used as an insulating material (okonite) for electric cables." Another special use of ozocerite is its employment, in the form of bottles, as a container for hydrofluoric acid.

In Allen's Commercial Organic Analysis it is stated:

Ozocerite, known also as ceresin, cerite, or mineral wax, usually occurs in the neighborhood of petroleum springs and in association with bituminous sandstone, clay-schist, gypsum, and common salt. Though not very abundant, ozocerite occurs in many parts of the globe, the most remarkable and best-known deposit being that in the Miocene rocks of Galicia, on the slopes of the Carpathian Mountains, and also on the Wallachian side of the range. It is also worked on the island of Tschelken in the Caspian and at Swatow-Astrow, near Aphesron, where a variety called "neftgil" is found. It exists in Turkestan, and a valuable deposit has been found in Utah. Its commercial interest is chiefly as a source of ceresin, though liquid hydrocarbons are also obtained by the distillation of the inferior kinds.

Crude ozocerite varies much in appearance. The finest varieties are transparent; of a pure yellow or greenish color, and can easily be kneaded between the fingers. Crude Galician ozocerite is a scaly or waxy substance, with a resinous fracture. It is usually brittle, but as hard as beeswax. It becomes negatively electric by friction and exhales an aromatic odor. According to Lach (Chem. Zeit. 13, 831), the so-called ozocerite from Colorado does not yield ceresin, but is suitable for paraffin making. It begins to distill at 360° and yields 90 per cent paraffin and oil and about 5 per cent of residuum. Caucasian ozocerite yields about 58 per cent of a second-quality ceresin.

American Deposits and Imports.

In Bulletin No. 285 the United States Geological Survey gives the result of its investigation of the Utah field, where it found ozocerite

deposits in the vicinity of Colton, near Soldier Summit, and near Midway Station, Colton being 7 miles southeast and Midway 3 miles west of Soldier Summit. These deposits occur in shales, shaly sandstones, and limestone strata in the lower part of the Tertiary deposits of the "Wasatch" group. The mineral occurring at these three points has essentially the same physical appearance. At the time of making its investigation the survey found that ozocerite had been exploited commercially at five or more localities, five mines having been equipped with more or less complete facilities for exploitation and three plants having been established for separating the product from the associated rock materials. Concerning separation methods then in vogue in Utah, the bulletin says:

The manner of separating ozocerite from the associated rocks is a simple process. The plan consists of a steam boiler and engine, a crusher, and steam-heated vats. The soft rock and ozocerite mixture is crushed and run into long vats with narrow bottoms containing water kept at a boiling temperature. The ozocerite melts at a temperature of 54° to 70° C. and floats off as a liquid into cooling vats, while the rock is driven out along the narrow bottom of the vat by revolving screws. On cooling the ozocerite is remelted in dry pans to remove the content of moisture.

Ozocerite is not separately recorded in the American official statistics, imports of this substance being included under the heading "mineral wax." In the calendar year 1911 the United States imported 5,280,363 pounds of mineral wax, worth \$393,621, in contrast to 7,880,697 pounds, valued at \$606,040, in 1910.

ENGLISH WOOL INDUSTRY.

[From Consul Augustus E. Ingram, Bradford.]

The following items have been collected from local newspapers:

A number of Wensleydale rams have been sent to the Netherlands, and dealers state that the cross between these rams and the native Dutch ewes produce the finest carcasses passing through their hands. In 1910, a Wensleydale shearling wether, one of the famous Wensleydale-Scotch Mountain (Blackface) cross, was awarded the third prize alive and the second in the carcass competition at Smithfield.

The 1912 conference of the Wensleydale Long-Wool Sheep Breeders' Association will be held at Doncaster June 29, in connection with the Royal Agricultural Show, which takes place July 2, 3, and 4.

At the recent meeting of the Wensleydale Blue-Faced Sheep Breeders' Association and Flock Book Society, held at Hellifield, Yorkshire, it was stated that the Wensleydale fleeces proved invincible in the "any or long-wool class" at the last royal show.

The Leicester Sheep Breeders' Association states in its annual report that the industry has been depressed for several years owing to the low prices of mutton on the hoof. In competition with other long and short wool breeds at the fairs, Leicester rams without exception realized the best averages.

Mercerization of Wool.

A chemical process, somewhat similar to the mercerization of cotton, is now being successfully applied in Barmen to Bradford-spun worsted yarns. The yarn is entered not into caustic alkali, as with the mercerization of cotton, but into a bath of bisulphite of soda, a chemical which exerts a shrinking action upon wool. This action is resisted by mechanical tension, and the process is continued for some 5 minutes at a high temperature, until the wool assumes a gelatinous or rubber-like elasticity. The yarn is removed into a weak mineral acid solution, boiled under relaxing tension for an hour, and is finally rinsed and dried. The resemblance to mercerization is thus close in detail, and is similar also in its effects. The elongation is very much greater, amounting to 33 per cent, so that the yarn which goes into the process as 26's 2-ply comes out of it as something near 35's 2-ply. Mercerizing enhances the strength of cotton, and "bembergizing" does not perceptibly impair the strength of wool. The treatment leaves the yarn in possession of a quite creditable handle and brings forth a luster yarn out of nonlustrous wool. An English patent for the process was taken out in 1910 by Dr. Emil Elsesser, of Langefeld, Westphalia, but, so far as can be learned, the process has not been utilized commercially as yet in England.

GERMAN TRADE IN HORSE-RADISH.

(From Consul General Robert P. Skinner, Hamburg.)

The fact¹ brought to my attention that American farmers can not grow horse-radish of first-class quality in competition with the horse-radish being shipped in large quantities from Hamburg to the United States, notwithstanding the American import duty of 25 per cent ad valorem, is not more surprising than that a number of other agricultural and horticultural products are being shipped from Germany to the United States. The declared value of horse-radish exported from Hamburg to American ports was \$111 in 1909, \$321 in 1910, and \$23,917 in 1911. During these same years seeds, etc., were shipped from Hamburg to the United States to the following values:

Articles.	1909	1910	1911
Seeds.....	\$1,079,872	\$1,174,599	\$1,357,718
Lily of the valley roots.....	74,729	95,959	173,240
Plants.....	25,063	30,114	32,221
Flowers.....	5,362	6,576	19,563

It will be noted that there has been a considerable increase from year to year in the value of each of the articles mentioned above.

The German horse-radish trade has developed considerably within the last few years, chiefly in consequence of a thriving export trade. The land in this vicinity is favorable to the cultivation of this crop, and the Germans themselves are perhaps the largest consumers of horse-radish in the world. The total exports of this root to all countries and the officially ascertained value thereof have been as follows during the last four years:

Years.	Tons.	Value.
1908.....	3,961	\$348,908
1909.....	3,551	316,302
1910.....	4,114	324,870
1911.....	4,121	310,352

These official figures show that while exports have increased, the market value of the produce exported has decreased.

Cold-Storage Speculation—Local and Export Prices.

There is said to be quite a speculative side to the business, which resulted last spring in the accumulation of a stock of 10,000 bundles of German horse-radish in cold storage in New York.

In the public markets of Hamburg 16.6 cents is the ordinary retail price of a bundle of 10 sticks of good horse-radish weighing 5.5 to 6.6 pounds. In the same market 60 sticks can be had for 71 to 95 cents, according to the quality. One dealer was prepared to sell 500 bundles of 60 choice-quality roots for 85.6 cents per bundle. These terms were quoted to a casual inquirer from this office. Commission merchants who operate on a large scale naturally secure better terms. One such large dealer supplies the following details in regard to the trade:

The very best roots come in bundles of 10 sticks for our own market and for the American and Russian trade. The prices now vary

¹ My correspondent states: "Horse-radish can not be grown by the American farmer for less than 4 cents per pound." [The same statement is made by growers at Washington, D. C.]

between 26 and 33 cents per bundle. Second-class sorts in bundles of 10 sticks for the local market and for America are worth from 14 to 19 cents per bundle. This sort is also tied up in bundles of 15 or 16 sticks for the export trade, in accordance with prices quoted in particular export markets. The above best and second sorts are frequently packed loose in bags and are then sold by weight. The present price is from \$2.85 to \$3.57 per 50 kilos (110 pounds). A third sort is made up in bundles of 20 sticks and is usually exported on a commission basis to England. The prices of this grade depend upon the English demand, which is very considerable.

SWISS TRADE NOTES.

[From Consul General Robert E. Mansfield, Zurich.]

Good Tourist Trade in Prospect.

The prospects are good for an excellent tourist season in Switzerland during 1912. Many new hotels have been built in the resort places during the past year and plans are being made for the entertainment of an unusual number of tourists. The Swiss Government is being urged to create a Federal office, to supplement the society now engaged in the promotion of the tourist traffic which is maintained by the various cantonal governments, and to expend \$200,000 a year in attracting tourists. With the \$800,000 which the railways, hotels, and local development spend each year for the same purpose, this would mean an expenditure of \$1,000,000 a year for the encouragement of a trade which annually brings many millions into the country.

Prejudices against Automobiles—Building Activity.

The contention between the peasants and the motorists in Switzerland becomes more acute each year as the number of cars on the country roads increases. Local legislation has made motoring difficult in some places and impossible in others. These communities are so distributed throughout the country that they make travel disagreeable, and this feeling of hostility to motorists has resulted in keeping many strangers from bringing their cars into Switzerland.

The general activity in the building trades and the public improvements in progress in all the important cities and towns evidence the general commercial prosperity and industrial progress of Switzerland. In Zurich a large number of modern business blocks and office buildings have been completed within the past year, for all of which there is a demand at good prices. Hundreds of new residences and apartment houses have been built and occupied during the year, indicating a rapid growth in the population of the city.

NEW BICYCLE LAMP IN HOLLAND.

[From Consul Frank W. Mahin, Amsterdam.]

A new electric bicycle lamp has been introduced in Amsterdam, for which electricity is generated by the operation of the bicycle. A small wheel attached to the shaft of the dynamo rests on the front or rear wheel of the bicycle, making many revolutions for each one made by the larger wheel. When the lamp is not needed, the little wheel can be set free from the bicycle wheel by a lever. A very powerful light is obtained at a speed of 15 kilometers (9.32 miles) an hour, but sufficient light is obtained at even less speed.

PAPRIKA OR PIMIENTO TRADE.

[From Consul Robert Fraser, Jr., Valencia, Spain.]

Spice millers in the United States seek information regarding the preparation of paprika or ground Spanish pimientos, which are raised in this district.

A dispute of long standing has existed between the Spanish farmers who grow the pimientos on the one hand and the millers and merchants on the other regarding the practice of adding olive oil to paprika. The farmers have always opposed the practice, which they regard as adulteration, and frequently invoked Government action to have it declared illegal. The evidence accumulated at the various Government investigations, however, failed to establish the growers' contention that the practice of adding a little pure olive oil was in any way harmful or prejudicial to health, while millers and dealers in the product maintain that a little oil is necessary for the better preservation of paprika and to minimize waste in handling and packing. The oil imparts cohesion to the mass and prevents the considerable loss which takes place in handling and transporting dry-ground pimientos in jute bags to packing stores and to the interior of the country and Spanish island possessions.

The latest official regulations on the subject prohibit the admixture of oil with pure paprika.

The trade, both home and foreign, in paprika is increasing yearly, as it not only enters largely as flavoring and coloring matter in all the sausage factories of this country, but is exported to Argentina and other South American republics, Cuba, Austria, France, Germany, and the United States.

AMERICAN MARKETS AND STATISTICS.

It is learned from the Bureau of Chemistry at Washington that paprika in which olive oil has been introduced is for the present admitted into the United States under the pure-food regulations, provided the labels state that it is ground in oil. However, it is considered more desirable that oil should not be added, as it gives the paprika an unreal, higher color and conceals the "ash" or waste matter. The value of paprika depends largely on the degree of high red color, which can best be determined when no foreign substance has been added. Its most extensive use is in catsup and sausage.

Paprika is imported in its ground state because attempts to grind these peppers in the United States have not been economically successful. They are ground cheaply in the little water-power mills of Spain and Hungary, whence comes the chief supply, the paprika not being grown in this country. The imports in the fiscal year 1911 of all kinds of capsicum, or red pepper (dutiabable at 2½ cents per pound), were 5,242,285 pounds, having an average unit value on shipment of 10.6 cents. Imports in 1910 were 4,319,763 pounds, and in 1909, 4,711,947 pounds, having respective unit values of 9.1 and 8.2 cents. The Hungarian paprika is quoted on the market at about one-third higher prices than the Spanish.

The word "pimiento" as applied to peppers should not be confused with "pimento," the allspice of commerce, and which is mainly purchased from Jamaica—about \$200,000 worth yearly. Allspice has a unit value on shipment of about 3 cents a pound and comes in

duty free. Black and white pepper also enter duty free, being imported in the fiscal year 1911 to the extent of 23,193,416 pounds, having an average unit value of 7.3 cents.

The process of preparing canned pimientos, which are also exported from Spain to the United States, was described a few years ago by the American consular agent at Bilbao as follows:

After being taken from the bush or vine the pimiento is placed in a vapor bath, where it remains a short while to facilitate removing the skin. The skinless fruit with its own juice is then hermetically sealed in tin cans, which are subjected to a second vapor bath. This terminates the process of canning. No preservative, such as vinegar, brine, or chemical product, is employed.

Inspection of Imported Paprika.

In his annual report, Dr. H. W. Wiley, Government chemist, makes the following statement with reference to the aggregate work at the laboratory in New York, and the inspection thereof of paprika:

The New York laboratory is chiefly concerned with the inspection of imported food and drug products. During the past fiscal year about 100,000 invoices of food and drug products have been inspected, representing a total value of merchandise of \$180,000,000.

In connection with the inspection of paprika and ground red pepper the study and detection of the adulterants commonly used have been continued. The refractive index of the nonvolatile ether extract of a large number of samples has been determined. The results indicated that when the conditions of drying the extract are properly controlled the refractive index, as well as the iodine number, will furnish evidence in the detection of added oil. As a result of collaboration of several chemists with the associated referee on spices, a provisional method for the detection of added oil in paprika was adopted in 1910 by the Association of Official Agricultural Chemists. In preparing the better grades of paprika only the shells and part of the seeds are used, the stems and placenta being removed. In order to utilize these by-products they are sometimes added to the cheaper grades, and as the addition of extra stems unquestionably injures the quality of the finished product, it has been the practice to subject samples to careful microscopical examination in order to detect this sophistication.

COALING CHARGES AT FRENCH PORT.

[From Consul James E. Dunning, Havre.]

The average charge for coaling and trimming ships at Havre is \$0.36 per ton. For vessels which, on account of their construction and the location of the hatches, need more labor and time to coal, the charge rises to \$0.48 per ton.

If coaling be done from the wharf, and barges are not used on the opposite side of the vessel at the same time, the rate of coaling in the port of Havre varies, according to the vessel, from 100 to 150 tons per day of 8 hours. When barges are also employed the rate is doubled.

The Compagnie Generale Transatlantique (French Line) owns special apparatus for coaling its liners, with which the coal is passed down a tubular "chute" into the bunkers. The consulate is informed that it is possible to put 500 tons on board in an 8-hour working day by this method.

It may be safely assumed that charges for coaling and trimming, as likewise the average rate of coaling, are the same for the port of Marseille as for this port.

The Mineral Resources of the United States, for 1910, part 1, Metals, 796 pages, and part 2, Nonmetals, 1,005 pages, have just been issued. Applications for copies should be addressed to the United States Geological Survey, Washington, D. C.

RUSSIA'S CHEMICAL INDUSTRY.

[From Consul John H. Grout, Odessa.]

The present output of the chemical industry in Russia represents the considerable value of \$77,250,000 per year. The principal items of this production are inorganic acids and salts, gunpowder, paints and lacquers, organic dyes, and superphosphates. The chemical factories are nearly always close to the leading industrial centers and consequently frequently far away from the regions producing the raw materials. This circumstance has often led to the importation of raw material from abroad, which, brought by sea, came far cheaper.

Young as the chemical industry is in Russia, it has in many lines become strong enough to monopolize the Russian market. Such lines are sulphuric acid, certain other acids, soda, and chlorate of lime. It seems probable from the present outlook that the production of sulphuric acid will be the one among Russian chemical productions which in the near future will attain the greatest development. The reason for this lies in the fact that wonderful as has been the fertility of the black-earth soil of Russia, that fertility shows serious signs of exhaustion, and fertilizers begin to be more understood and employed. Foremost among these fertilizers are superphosphates, of which Russia will eventually require enormous quantities, and to produce these, for each 72 pounds 36 pounds of sulphuric acid is required. For nitrogenous fertilizer Russia will have to depend upon foreign countries until the considerable water powers available in the Caucasus are utilized.

As regards sulphate of ammonia, the coke ovens in the Donetz Basin are expected to turn out shortly much of the total requirement. A good beginning has already been made.

CENSUS OF URUGUAY.

[From Consul Frederic W. Goding, Montevideo.]

The census statistics of Uruguay, taken in 1908 and now available, afford the following summary:

Population, 861,464 Uruguayans and 181,222 foreigners, the latter consisting of 62,354 Italians, 54,885 Spaniards, 27,789 Brazilians, 18,600 Argentinians, 8,341 French, 1,444 Turks, 1,406 Swiss, 1,324 British, 1,112 Germans, 1,109 Austrians, and 182 United States citizens, the balance being of many nationalities. The density for the entire Republic was 5.57 persons per square kilometer (0.386 square mile), and of the Montevideo Department, 463.7.

The population of the capital cities was: Montevideo, 291,465; Paysandu, 20,953; Salto, 19,788; Mercedes, 15,667; Minas, 13,345; Melo, 12,355; San Jose, 12,197; Rocha, 12,200; Florida, 10,606; Durazno, 10,597; Rivera, 8,986; San Eugenio, 8,857; Canelones, 8,523; Trinidad, 8,317; Colonia, 8,021; Treinta y Tres, 7,718; San Fructuoso, 7,546; Fray Bentos, 7,359; and Maldonado, 4,421.

Drills for Mining in Manchuria.

Mining at Fushun collieries in Manchuria is now done with pick and shovel, but it is learned by Consul General Fred D. Fisher, of Harbin, that the introduction of drills is contemplated.

THE DEVELOPMENT OF TURKEY.

[From the Near East.]

Establishment of Factories.

Industries in Turkey are mostly quite primitive. There is a tendency to start factories on a small scale, but the supply of labor seems likely to prove a difficulty. A glass factory on the Golden Horn, belonging to the Civil List Department, has been leased and is now being worked under British management. It employs 250 hands and turns out about \$10,000 worth of glass bottles, etc., per month. There is one other glass factory working in Constantinople at Pasha Bagtche, on the Bosphorus; it employs 350 hands and produces about \$15,000 worth of glass monthly. An Ottoman company has been formed, under British management, with a capital of \$90,000, to manufacture soap; the works are on the Golden Horn, and produce about 50 tons of soap per month.

A brick and tile factory has started work at Pasha Bagtche, on the Bosphorus, on a small scale, and is to be considerably extended. A company has been formed for starting a floating dock at Stenia, on the Bosphorus. Two cement factories have been established with local capital at Guebze, on the Gulf of Ismidt, and the cement is on the market at the price of 12 piasters per sack of 50 kilos (about 48 cents per 100 pounds).

The Turkish Government cloth mills at Kara Mursal and Ismidt have been equipped with new machinery, and manufacture the khaki woolen cloth required by the army. At Panderma there is a woolen yarn spinning mill belonging to the Oriental Carpet Manufacturers' Co., which produces 2,750,000 pounds annually and employs 140 hands. At Smyrna a weaving mill has been opened with a producing capacity of 500,000 meters (about 546,000 yards), which will be increased this year to 1,200,000 meters (about 1,312,000 yards). It will employ 300 to 400 hands.

Industrial companies in Turkey are allowed to import their machinery free of duty, and are given an undefined preference for Government contracts. An industrial law was before the Chamber to allow free importation of raw material and other advantages, but was not passed during the last session (ended January, 1912).

Irrigation Schemes.

Preliminary contracts have been made with the National Bank of Turkey for the irrigation of some 400,000 hectares (hectare=2.47 acres) of land in the Meander Valley, Province of Smyrna. Preliminary surveys have been carried out for the bank by a British firm, and a definite agreement with the Government is under discussion. Preliminary contracts have been made with the Anatolian Railway Co. for the irrigation of 500,000 to 600,000 hectares in the Adana Plain, and with a British firm for work in Mesopotamia connected with the new Hindieh barrage and the Habbanea escape. The "Régie Générale des Chemins de Fer" are surveying the Rivers Drin, Boyana, and Kiri in the Province of Scutari, Albania, with a view to regulating them, and have also other irrigation schemes in hand.

AGRICULTURAL MACHINERY COMPETITION IN URUGUAY.

An international competition for power agricultural machinery is to be held in Uruguay from May to October, 1912. It has been organized by the Rural Association of Uruguay, under the auspices of the Ministry of Industries, and will embrace seven classes: Steam plows, motor drag plows, traction plows, harrows, cultivators, seeders, and mowers.

Applications for admittance to the competition must be made in writing prior to May 1, and must state the indicated power of the motor and its guaranteed effective power, guaranteed effective traction, weight, guaranteed surface work, fuel consumption, and price of machine f. o. b. Montevideo. A drawing of the machine, giving its principal measurements, must also accompany the application.

Only regular trade types of machines will be admitted to the competition, after the payment of a nonrefundable entrance fee of \$50 gold. Gold and silver medals and diplomas will be awarded by a jury after practical working trials of the various machines, these trials to take place between May 1 and October 1. More detailed information of the competition is contained in a prospectus that will be loaned by the Bureau of Manufactures.

ROUMANIAN BUDGET SHOWS FINANCIAL STRENGTH.

[From American Minister John B. Jackson, Bucharest, in continuation of reports in Daily Consular and Trade Reports for Feb. 27 and Mar. 25, 1912.]

In the budget for the fiscal year 1912-13, just submitted to the Roumanian Parliament, the revenue is estimated at \$97,579,436 (an increase of \$5,250,000 over the estimates for the current year—which has already produced a proportional "excédent" of more than \$7,500,000 during its first nine months), with estimated expenditure amounting to \$96,595,190 (or about \$5,800,000 more than for the year 1911-12). For the first time in Roumanian history the budget exceeds one-half a milliard of francs (\$96,500,000).

In connection with the budget the Minister of Finance has announced a proposed loan of \$67,550,000, in order to cover the conversion of certain existing loans and to provide funds for the continued development of the railway system, the completion of the port of Constantza, the drainage of the Danubian marshes, the purchase of forests, and the needs of the army. In place of certain 4 per cent bonds which are at present redeemable at undetermined dates through the method of drawing certain numbers by lot at regular intervals, it is proposed to create perpetual 4 per cent bonds in which the funds of public institutions, etc., can be invested permanently, to the amount of about \$30,000,000 (or about one-tenth of the whole public debt of \$300,000,000). By this operation, the annual amortization having been \$5,800,000, a budgetary expense of \$580,000 a year will be saved, and the administration of these public institutions will be simplified, as it will no longer be necessary to replace by other securities those which have been redeemed by lot.

INDUSTRIAL NOTES FROM LOWER CALIFORNIA.

[From Consul Frederick Simpich, Ensenada, Mexico.]

Wheat damaged by drought.—A long drought has been broken by rains, but it is believed this relief came too late to insure a normal wheat crop. Toward the end of the drought many cattle were dying for lack of pasturage.

Wharf destroyed.—The new wood and steel wharf at Ensenada, erected at a cost of about \$60,000 by American capital, has been almost totally destroyed by storms. The city is without a wharf at which vessels can dock.

Moving-picture films.—An American motion-picture concern has sent a company of 15 performers to Ensenada, where plays depicting western and Mexican life are being given and picture films taken. These films, after development and censorship, will be exhibited in the United States.

No regular calls by American vessels.—The North Pacific Steamship Co.'s steamer *Eureka*, which for several months past has been run on a twice-a-week schedule between San Diego and Ensenada, has been withdrawn from this service. The Mexican steamer *Victoria*, of the Compañía Naviera del Pacifico now has a monopoly of this business. The Pacific Coast Steamship Co. has withdrawn its regular monthly vessel from the Mazatlan-San Francisco run. No American vessel now calls regularly at this port.

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COMMERCE OF DUTCH WEST INDIES.

[By Consul Elias H. Cheney, Curaçao, Feb. 14, 1912.]

During 1911 the island of Curaçao underwent the severest drought recorded since the establishment of the United States Weather Bureau office here, in 1898. The rainfall for the year was only 15.16 inches, of which 6.92 inches fell during January and February.

The rainy season generally extends from October to February, during which period in 1910-11 the rainfall was 17.55 inches, while in the 1911-12 season the fall was only 2.71 inches. While the island was covered with verdure for nearly six months last winter, the only green to be seen this winter is where there are wells or windmills. There are about 500 windmills on the island, all of American make.

In Bonaire and Aruba, neighboring islands, conditions have been no better. Water is scarce, being brought in by mule carts and boats. The distilled-water plant installed about a year ago is working fairly satisfactorily, and produces about 50 tons of good water a day, which is supplied to steamships and to the residences of the wealthy. The supply is not adequate to the demand. The common price for water is 5 colonial cents (2 cents American) for a 5-gallon can.

The ordinary source of water supply for the city is found in the cement-lined cisterns of houses, catching water from the tile roofs. These cisterns hold a year's supply of water for a family—about 70,000 gallons—and the water so kept is of excellent quality. In an ordinary winter the rains would fill these cisterns three or four times.

As a result of the drought there can be no crop, and animals are dying in the country districts. There is also much scurvy there, owing to the lack of fresh food. Most of the food supplies will have to come from New York, and the imports of hay and corn meal already show large increase. The season in which rain may be expected is now past, and any considerable fall during the first six months of the year would be out of season. It is thought that it will take the islands many years to recover from the effects of this drought.

Straw-Hat Industry—New Tramway.

During 1910 the Government, in cooperation with the Business Men's League, established a school of instruction in hat making, and sent a commission to Venezuela (where the straw is grown) and to Porto Rico to study the best methods of manufacture. As a result the hat-making business of Curaçao is on a much stronger footing than formerly. The number of women who can make the better grades of hats has largely increased, the demand has grown, and prices have advanced. From \$59,143 in 1910 the exports of hats rose to \$129,624 in 1911.

During 1911 a new gasoline-motor tramway $1\frac{1}{2}$ miles long was put into operation on the east side of the channel, replacing the old one-donkey car. The new road is up-to-date, with modern rails, good roadbed, and two commodious cars, each accommodating 30 passengers. The service is half-hourly—quarter-hourly in rush hours. There is no public conveyance of any kind on the west side of the channel, although that part of the town has fully half of the population.

Sisal Culture—Phosphate Deposits.

The prevailing drought of the past year operated rather discouragingly, but by no means disastrously on the experiments in the culture of sisal on this island. It seems proved that the plant does better with a reasonable amount of rain, but that it can live, producing less bountifully, with even less than 10 inches of rain a year. The disease which developed during the more humid seasons has apparently disappeared and the plants are now healthy, as far as can be seen. Only small amounts of sisal have as yet been shipped, not large enough to appear in the export statistics. The quality is very fine, and the Curaçao Sisal Cultivation Co. is not discouraged. The company intends to experiment with artificial fertilizers during 1912, and is ready for correspondence with fertilizer companies. No fertilizers have ever been imported, but the island affords an excellent place to test the use of fertilizers in dry climates. Many tons of goat manure are annually shipped from Curaçao to other islands in the West Indies.

A year ago hope was entertained of the resumption of work by the Curaçao Phosphate Co. These works have been idle 16 years or more, owing to a disagreement between the colonial Government and the company as to the royalty to be paid by the company. Phosphate is abundant here and of good quality, and the exports would more than double with the development of these deposits. So far this hope has not been realized, but the Government seems determined to push the problem to a solution.

Harbor Improvement Desired—Navigation—Population.

The demand is still great for the substantial improvement of this port, in view of the coming opening of the Panama Canal. The proposal of a foreign company, made a year ago, to make extensive improvements of the harbor, including the building of a dry dock and the widening of the channel, in return for a concession granting the right to impose port dues, was thought to be prejudicial to the reputation of Curaçao as practically a free port with light

port charges and was rejected by the Government. The only shipping change made during 1911 was the substitution of a sailing vessel for the little intercolonial steamship *Princes Juliana*, which was found to have insufficient power. The steamship arrivals during 1911 numbered 363, with a total tonnage of 850,832. Of these, 153 were American, principally arrivals of the Red D Line. The sail arrivals numbered 1,175, of 44,921 tons. Except on the Red D Line vessels and an occasional naval vessel, the American flag has practically disappeared from this port. The establishment of a parcel-post system with the United States, which took effect January 1, 1912, caused much satisfaction.

The health of the island was excellent throughout 1911, with the exception of the scurvy previously mentioned, and no cases of infectious diseases have been reported during the past three years. The population of Curaçao is given in the last official report as 32,585, Aruba 9,357, and Bonaire 6,383.

Exports to United States.

The principal increase in exports from Curaçao during 1911 was in the item of straw hats, which were all the production of this island, save a few from Aruba and Bonaire. The only other significant change was in skins, which showed a large increase. These are not the product of the island, but are gathered up by small schooners running to other islands and to Venezuelan ports. Much of this trade formerly went to Europe, before the duty was removed from hides in the United States. The decrease in exports of divi-divi was due in part to the drought and in part to the diminished demand in the United States. The increased European demand for hardwoods greatly decreased the export to the United States.

The exports to the United States and Porto Rico during the past two years, as invoiced at this consulate, were as follows:

Articles.	1910	1911	Articles.	1910	1911
UNITED STATES.			UNITED STATES—continued.		
Aloes.....	\$222	\$1,574	All other articles.....	\$6,107	\$5,000
Bark, mangrove.....	1,648		Total.....	203,460	304,602
Coffee.....	4,485	22,429	PORTO RICO.		
Divi-divi.....	5,430	1,040	Bark, mangrove.....	2,033	1,043
Guano.....	11,450	10,778	Corn.....	4,542	
Hats, straw.....	59,143	129,624	Fertilizer.....	876	1,399
Phosphate.....	5,621	2,834	Peanuts.....	3,182	367
Seeds, castor.....	7,871	792	Skins, goat.....	3,909	
Skins.....			All other articles.....	1,861	2,351
Deer.....	1,806	3,491	Total.....	16,403	5,160.
Goat.....	57,287	107,621			
Sheep.....	4,256	5,909			
Other.....		1,665			
Woods.....	38,134	11,845			

There were no exports to other American dependencies.

Total Trade of the Colony.

The imports into Aruba are almost entirely included in those for Curaçao. The exports from that island in 1910 were valued at \$216,904, of which \$44,895 were aloes, \$21,030 gold, and \$97,066 phosphate. The Bonaire exports totaled \$65,605, of which divi-divi made up \$29,299, charcoal, \$9,194, and salt, \$8,555. The charcoal

all came to Curaçao, as did much of the divi-divi, the latter being reexported to Europe.

The total imports and exports of the colony during 1910, the latest year for which figures are available, were as follows:

Articles.	Value.	Articles.	Value.
IMPORTS.		IMPORTS—continued.	
Animals, live.....	\$9,422	Provisions—Continued.	
Bags and barrels, empty.....	14,509	Meat products—	
Breadstuffs:		Margarin.....	\$5,936
Biscuits.....	20,204	Meats.....	11,190
Corn.....	4,004	Pork heads, salted.....	5,351
Flour.....	87,543	Other.....	6,149
Meal.....	59,632	Rope.....	7,688
Canned goods.....	16,953	Soap.....	9,895
Clothing, ready-made.....	6,702	Spirits, wine, and malt liquors.....	60,730
Coal.....	74,081	Starch.....	6,281
Coffee.....	17,598	Straw, for hats.....	15,001
Divi-divi.....	52,432	Sugar.....	42,943
Drugs and chemicals.....	8,277	Tobacco, and manufactures of.....	67,868
Glass and earthen ware.....	8,963	Vegetables.....	11,064
Hats, straw, etc.....	7,290	Wood, and manufactures of:	
Hides and skins:		Furniture.....	8,972
Goatskins.....	40,803	Other.....	17,274
Other.....	8,429	All other articles.....	402,125
Iron and steel, and manufactures of.....	28,113	Total.....	1,243,015
Leather, and manufactures of:			
Leather.....	16,021	EXPORTS.	
Shoes.....	9,533	Aloes.....	43,628
Matches.....	3,013	Divi-divi.....	92,421
Oils:		Hats.....	95,024
Kerosene.....	15,984	Hides and skins:	
Linseed.....	3,476	Hides.....	23,506
Turpentine.....	324	Skins—	
Other.....	5,760	Goat.....	67,790
Paints.....	6,222	Sheep.....	2,726
Perfumery.....	11,643	All other articles.....	45,057
Provisions:		Total.....	370,152
Dairy products—			
Butter.....	15,958		
Cheese.....	12,649		

INCREASE OF CURRENCY IN PARAGUAY.

[From Consul Cornelius Ferris, Jr., Asuncion.]

By a law promulgated January 12, 1912, the issue of paper money of the Republic of Paraguay was increased from 32,500,000 pesos to 65,000,000 pesos. The Paraguayan paper peso is worth 6½ to 9 cents in American currency, varying with the daily fluctuation of the rate of exchange with Argentine gold. It is believed that the business of the country can absorb a much larger volume of currency than the amount heretofore in circulation, and that the new emission will not greatly increase the rate of exchange.

The executive authority is authorized to disburse the amount of the new emission in payment of arrears under the national budget and in meeting expenses incurred by the revolution now in progress. To this end the Government has arranged for the deposit of 10,000,000 pesos of the new emission in El Banco de la Republica, of Asuncion, for which it is to receive 500,000 pesos Argentine gold (equal to \$482,500 American currency), or at the exchange rate of 1 Paraguayan peso for 4.8 cents in American money.

An agricultural college is to be erected in the near future by the Mexican State of Sonora, but Consul Louis Hostetter, of Hermosillo, says that construction has not yet been started. The consul sends the names of two agricultural experiment stations now there.

NOTES FROM INDIA.

[From Consul General William H. Michael, Calcutta.]

New Stamps—Foreign Trade—Wheat Exports.

The new postage stamps bearing the portrait of King George V were placed on sale at Indian post offices March 1.

The foreign trade of the port of Calcutta for the 10 months ended January 31, 1912, was: Merchandise—imports \$146,718,689, exports \$221,479,204; treasure—imports, gold \$19,193,975, silver \$5,870,278; exports, gold \$46,830, silver \$210,565.

The total exports of wheat from Karachi during the year ended December 31, 1911, amount to 1,041,336 tons, in contrast to 865,403 tons in 1910. These figures make Karachi the chief wheat-shipping port in the British Empire.

Groundnut Crop—Long-Staple Cotton.

The final memorandum of India's groundnut crop for the season 1911-12 gives the total area under this legume as 1,200,900 acres in the three Provinces which produce groundnuts to a considerable extent—Burma, Bombay, and Madras. In 1910-11 the area was 951,900 acres. The total yield is estimated at 542,200 tons of unshelled nuts, against 503,200 tons in the preceding season.

During January cotton from American seed was sold at Lyallpur and Sargodha at prices ranging in the former city from \$2.90 to \$3.16 a maund (82½ pounds), according to quality. The auction at Sargodha realized \$2.82 a maund, while native cotton was \$2.49 a maund. The cotton there was very poor. The ginning factories in Lyallpur are now buying Indian-grown American cotton at higher prices than the native fiber, and ginning it separately. This is a most important step toward the establishment of long-staple cotton as a paying crop for Indian cultivators.

[From Consul Edwin S. Cunningham, Bombay, Feb. 20.]

Warehouse Fire—Breeding Kankrej Cattle.

The worst fire which Bombay has experienced in a number of years occurred on the Cotton Green February 20, when 41,692 bales of cotton were destroyed or damaged. The financial loss is estimated at \$1,750,000.

Considerable interest has been shown in breeding the well-known type of Kankrej cattle in other parts of the world than India. During the last three years over 300 bulls have been purchased by Japan, and a great many others have been shipped to Brazil and other South American countries. A breeder in Cuba is now making inquiries concerning the possible importation of animals from Gujerat into that Republic.

Uses of the Soap Nut.

Natives of India find many uses for the dried, fleshy berries of the soap-nut tree. These "nuts" are employed as detergents, and by the dyers of India are supposed to possess special merits in the preparation of certain dyes. In Kashmir the soap nut is preferred to the European soaps for washing shawls; in other parts of the country it is specially valued for washing silks, and is used by Indian jewelers to restore and brighten silver plates and ornaments tarnished by exposure. The soap is also used medicinally.

It is only during the last few years, however, that this fruit has been exported to European markets. None, it appears, has been shipped to America, but recent inquiries at this office make it apparent that exporters are anxious to obtain a market in the United States for this article. The Indian soap nut, it would seem, corresponds to and can be put to the same uses as the quillai bark (*Quillaja saponaria*) from Chile.

Final Cotton Estimate.

The final general memorandum on cotton crops for the season 1911-12 for the whole of India has been summarized by the Director General of Commercial Intelligence and published in the Indian Trade Journal, under date of February 15, 1912, as follows:

This memorandum summarizes the provincial reports of the cotton crop up to February 1 and compares them with those for the two previous seasons. The total area in all territories reported on is now computed at 20,393,000 acres, which marks a net decrease of nearly 10 per cent on the 22,595,000 acres (revised figures) at this time last year. The total estimated outturn is 3,135,000 bales of 400 pounds, as against 3,853,000 bales (revised figures) for last year, representing a decrease of 18.6 per cent. To this figure might be added some 1,000 bales estimated as the production in native states in Bengal which make no returns. But doubt is thrown upon last year's estimate by a comparison of it with the sum of new exports and internal consumption, this latter being computed on a basis arrived at in agreement with the Bombay Cotton Trade Association (Ltd.). The following statement compares the figures for the last three years ending September 30:

	1909	1910	1911
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
Net exports.....	1,990,000	2,826,000	2,302,000
Mill consumption.....	1,760,000	1,652,000	1,551,000
Consumption outside mills (conjectural) ¹	450,000	450,000	450,000
Total.....	4,200,000	4,928,000	4,303,000
Deduct estimated yield.....	3,692,000	4,718,000	3,853,000
Deficit.....	508,000	210,000	450,000

¹ Substituted after renewed consultation with the Bombay Cotton Trade Association (Ltd.), for the figure of 750,000 formerly estimated.

Prices—Imports of Cotton from the United States.

The course of prices is indicated by the following figures, which represent the price of Broach cotton at Bombay per candy of 784 pounds, for the month of December, during the last six years: 1907, \$87.90; 1908, \$71.35; 1909, \$91.45; 1910, \$114.80; 1911, \$81.75.

The Bombay Cotton Trade Association estimates that about 200,000 bales of American cotton will be imported during the current (1911-12) season. The Bombay Port Trust report states: "The figures [for the year 1909-10] include 4,850 bales of American cotton, as against 18,885 bales in 1908-9 and 28,963 in 1907-8." From this it is apparent that the demand for the present season has considerably increased over that of any preceding year. American cotton is purchased in the usual course of trade by firms here buying in Liverpool or an American port.

[From the London Times.]

Upper Jhelum Canal Works.

Good progress is being made with the Upper Jhelum Canal, which, begun more than seven years ago, is one of the three sections of the great triple canal project being carried out in the Punjab. The main purpose is to enable the Upper Chenab and

Lower Bori Doab Canals to supply water in the winter months to a large tract of arid country in the Sialkot, Gujranwala, Lahore, Multan, and Montgomery districts. The canal will also incidentally irrigate some 300,000 acres in the Gujerat district.

The canal, which has a length of 88 miles, takes off from the left bank of the Jhelum at Fort Mangla, the point where the river emerges from the Himalayas. The path of the canal has to be cut through the lower hills to a depth of over 100 feet. As it crosses the natural watershed of the outer Himalayas and cuts through the northern slopes of the low hills known as the Gujerat Pabbis, it encounters numerous torrents with sandy beds and deep slopes. During the greater part of the year the beds are dry, but during the monsoon they are filled with raging masses of water. This feature of the country has necessitated high embankments, deep cuts, and many large drainage works. On the southern slopes of the Pabbis the torrents are deltaic in formation. It is calculated that the total discharge of all the torrents if they flowed simultaneously would be about 614,000 cubic feet a second, but fortunately they are not in flood together, and usually each is in flood only for a few hours at a time.

The 3 miles of cutting at the headworks at Mangla is the heaviest part of the undertaking, and excavations are carried on night and day. A light tramway being found inadequate, a broad-gauge plant is being put down, with 6 steam navvies, a like number of tank engines, between 300 and 400 tip-wagons of 15 cubic yards capacity, 15 miles of broad-gauge track, and about forty 1,000-candlepower lamps, with telephonic and telegraphic plant. Work has been in progress on the cutting since the beginning of last year, and since January there have been continuous night and day shifts. Apart from this cutting, which will not be finished until the autumn of next year, the channel excavations will aggregate a total of 780,000,000 cubic feet. Most of it is in light soil, and consists of deep cuts with long embankments, necessitating the employment of many miles of tramway track, the lead out frequently being as much as three-quarters of a mile long. These long embankments could not be safely erected until the works required to pass the torrent discharges had been constructed. The cost of the channel excavations alone is estimated at £440,000 (\$2,141,260).

[Reference to the Jhelum irrigation works was made in Daily Consular and Trade Reports on Jan. 12 and Oct. 7, 1907.]

CHILEAN PRODUCTION OF NITRATE.

[From Consul Alfred A. Winslow, Valparaiso.]

The nitrate production of Chile during 1911 exceeded any previous record, reaching 54,784,271 Spanish quintals (quintal=101.41 pounds) against 53,596,000 quintals for 1910. The business was prosperous, notwithstanding the low prices for the first six months of the year, which in March fell as low as \$1.66 United States gold per Spanish quintal on board steamer on this coast. Prices gradually advanced to \$1.94 in October.

During the year much work was done on new nitrate works which are to be completed in 1912. The capacity of these works is about 18,000,000 quintals per annum, and Congress has authorized the President to put still more nitrate lands on the market.

The consumption of nitrate during 1911 increased 108,000 tons. The United Kingdom consumed 10 per cent more than in 1910, the United States 10 per cent, Holland 7 per cent, Belgium 7 per cent, France 4 per cent, and Italy 12 per cent, while Germany consumed about 4 per cent less. The committee in charge of the nitrate propaganda in foreign markets did some effective work during the year and is thoroughly organized for the 1912 campaign. This organization is strongly backed by the Chilean Government.

The prospects for 1912 are good, with an increase of 517,500 Spanish quintals for the first 15 days over the same period of 1911, and at better prices. Nitrate constitutes about 80 per cent of the exports of Chile, and supplies about 60 per cent of the revenue of the Government.

BRITISH INDUSTRIAL NOTES.

[From Consul Albert Halstead, Birmingham.]

Motor Lifeboats and Sprinkling Carts.

There are 19 motor lifeboats in use on the coasts of Great Britain, of which 15 were built specifically for this purpose and 4 are lifeboats of the old type converted.

The use of gasoline motors for various purposes continues to increase. One of the interesting new developments is the construction of a watering cart with a capacity of 550 gallons, equipped with a 42-horsepower engine that not only propels the vehicle but also operates a pump, which is of assistance in spreading the water as well as in filling the tank.

Lighting Device—Puddlers' Wages—Automatic Pistols.

A new device to light the steps of automobiles at night has been placed on the market. It is attached to the lower edge of the side door and consists of a heavy brass hood in which is a metallic-filament lamp with a small trigger by which the contact is made or broken according to whether the door is open or shut.

The annual report of the Midland Iron and Steel Wages Board, which controls wages in North and South Staffordshire, Shropshire, Lancashire, South Yorkshire, North and South Wales, Cheshire, and Derbyshire, shows that the rate of wages for puddling was \$2.13 per ton during the whole of 1911 as compared with \$2.07 in the previous year.

While provincial gunmakers have been passing through a period of considerable stress, it is stated that the automatic-pistol industry is satisfactory. A Birmingham firm has received an order for high-velocity automatic pistols for the British Navy, this same concern having also recently supplied the London police with .32 automatics.

Coventry's Railways—Self-Starters—Motor Lawn Mowers.

The city of Coventry, which has been growing rapidly by reason of the development of the automobile industry, decided some time ago to take over the street railway companies operating in the municipality. As a result of arbitration the price has been fixed at \$983,675 as a going concern. The costs of the arbitration, which the city will pay, are said to be about \$24,300.

The question of self-starting of automobiles has received much attention in the last few months in England since the new models of American cars have arrived. Some of the best British motor-car makers, who in their designs for 1912 provided no self-starters, are devoting no little attention to determining the best type for future designs. In this connection a prominent technical journal remarks: "Owing to their being more readily fitted to existing engines, it is anticipated that we shall see more of acetylene starters than of other kinds in the near future."

British manufacturers have been gradually improving their gasoline-driven lawn mowers so that those now on the market are said to give much satisfaction. The new lawn mowers are manufactured in sizes from 24 to 42 inches by one firm, while another company makes one of 30 inches. Sufficiently powerful motors with reliable reversing gear are used, as well as a powerful brake. In England motor lawn mowers are very popular, particularly on large estates. Special

attention is also being devoted to the construction of horse-drawn mowers for cutting rough golf courses; these are of light draft and speedy in operation.

Automobiles for Japan—A Gasoline Electric Car.

The Board of Trade Journal states, on the authority of the German consul at Kobe, that openings for business motor vehicles in Japan have much improved, as both State and communal authorities as well as transport companies intend to employ them for the carriage of passengers and goods. The vehicles should be capable of hard wear, as the roads in the mountainous districts are very bad and there is a scarcity of experienced chauffeurs and mechanics. On account of the narrow streets cars ought to have short and narrow bodies, easily steerable front wheels, strong brakes, and strong rubber tires.

The Great Western Railway Co. is operating experimentally a gasoline-electric passenger car on one of its services. This car is manufactured on designs made by the British branch of an American electric company in the Birmingham consular district jointly with the railway officials. It has a 40-horsepower gasoline engine coupled direct to the dynamos, from which the current is taken to two electric motors on the axle. It has accommodations for 44 passengers and is much lighter than the steam rail cars used by the railway company, the weight per passenger being 700 pounds as against 1,512 pounds on the steam cars. The car has a gasoline storage capacity sufficient to run it 250 miles at a speed of 35 miles per hour.

Milking-Machine Trials.

The following item from the Hardwareman and Ironmongers' Chronicle may be of interest to American makers of milking machines:

The Midland Agricultural and Dairy College has been carrying out an experiment with what appears to be a new pattern milking machine of the suction type. One of the objects seems to have been to compare it with hand milking, for both quality and quantity. We gather that the yield diminished more rapidly with the machine than it did when the cows were milked by hand; and when cheese was manufactured from the milk it was found that although the greatest possible care was taken to keep the tubes of the machine properly cleaned and in good condition good quality was much more uncertain in the case of milk drawn by machine than where drawn by hand. Milking machines are used in some large herds, particularly in America; but in our country a suitable machine for a small dairy herd has not yet met with any acceptance among dairy farmers.

Notwithstanding the criticism, it would seem that with proper introduction a suitable milking machine might be sold in the United Kingdom.

TRADE EFFECT OF INTERNATIONAL EXHIBITIONS.

As indicating the probable effect on the trade of the United Kingdom of the Latin-British Exhibition to be opened in London in May, a contributor to the Times of that city points out that, according to French statistics, British exports to France rose from \$152,540,000 in 1908, the year when the Franco-British Exhibition was held, to \$170,643,000 the following year, \$178,877,000 in 1910, and \$197,020,000 in 1911. Similarly, it is pointed out, the Japanese-British Exhibition at London in 1910 stimulated commercial relations between Japan and the United Kingdom, British exports growing, as shown by Japanese records, from \$42,941,000 in 1909 to \$47,161,000 in 1910 (the year of the exhibition), and \$55,356,000 in 1911.

AMERICAN RAW COTTON IN CHINA.

[From Vice Consul General W. Roderick Dorsey, Shanghai.]

No American raw cotton was imported into China during the 1910-11 season, but between 40,000 and 50,000 bales were contracted for in October, 1911, for 1911-12. This demand for American cotton is unusual, due principally to the holding back of the Chinese cotton crop by the farmers, in the hope of higher prices, and also to the low price of American cotton, which enabled the local mill owners to assert their independence of the farmers by purchasing supplies in America for the early season operations.

When the farmers might have brought out their cotton holdings later, they were deterred because of the disturbed state of the country. Since the beginning of 1912, with quieter conditions around Shanghai, native cargoes have arrived freely, but below normal years, and exports to Japan have been resumed. Local mill consumption has been less than in preceding years because of an almost complete cessation of operations by native plants on account of financial stress attendant upon the revolution. It is not believed that the acreage of cotton has been reduced, as the farmers made good profits last season.

There will be no more orders for American cotton this season, and it is believed that a local demand for the American product can only be created in years of exceptionally low prices in the United States or of short crops or disturbed conditions in China. That purchased this season was all imported direct by European or Japanese houses through their American agents. In 1910, in addition to supplying the demands of the local mills and the millions of hand looms throughout the country, China exported 332,615 bales of 500 pounds each of raw cotton, of which 294,600 went to Japan. In the same year China imported 63,770 bales, of which 58,162 came from British India.

ARGENTINE FROZEN MEAT IN NETHERLANDS.

[From Consul Frank W. Mahin, Amsterdam.]

An illustrated pamphlet has just been published by the manager of an Amsterdam warehouse company regarding the desirability of importing frozen meat from Argentina—a subject which has been much discussed in the Netherlands lately.

The pamphlet considers the climate, pastures, methods of breeding, and sanitary conditions generally relating to the slaughter of cattle and the treatment of beef in Argentina, all the conclusions being favorable. It reasons that Argentine frozen meat has the same feeding value as Dutch meat, and is much cheaper, therefore answering the needs of the poorer classes who can not buy Dutch meat. The pamphlet says that while Argentine beef can be delivered, import duty and all other charges and expenses paid, at Amsterdam meat shops for 9 cents (United States) a pound, the dealer here pays at the Amsterdam abattoir between 17 and 18 cents a pound for first quality Dutch beef, 14½ cents for second quality, and 12 cents for third.

It is claimed that imports of frozen meat would not affect the prices of Dutch beef, as the former would be eaten by people who now use horses flesh or no meat at all.

NOTES FROM THE RUSSIAN FAR EAST.

[From Consul John F. Jewell, Vladivostok, Siberia.]

Japanese shipbuilding brisk.—Travelers from Japan report much activity in the Japanese shipyards, where 100 steam trawlers are under construction, it is stated.

A gold deposit of exceptional richness is rumored to have been recently discovered at the Luibavinsky mine, on the River Onon, about 200 miles from Chita. It is reported that there is more than 1 pound of gold to 1½ tons of gravel.

Railway management.—The management of all express trains on the Trans-Siberian Railroad has been turned over to the International Sleeping Car Co. Through express trains, without transfer, have been introduced on the Vladivostok-Moscow line.

New bank proposed.—The Mutual Credit Banks of the Russian Far East are working for the organization of a special Siberian real estate bank. It is proposed to organize the new bank on the lines of one of the European Russian real estate banks.

The Russian Volunteer Fleet has purchased 5 new steamers, and will this season start an improved steamship service between Vladivostok, Kamchatka, and Anadir. While navigation is open 9 steamers will be put on and 18 round trips will be made from Vladivostok.

Drainage machinery.—At the request of the governor general of the Priamur district, the Department of Domains has appointed Engineer Stakle, chief of the hydrotechnical branch of the Amur Expedition, to visit the United States to observe the latest American methods of reclaiming swamps and the machinery and outfits used for this purpose.

An agricultural school is to be established at Nicol'sk-Ussurisk. This school will be the first of its kind in the Russian Far East. The Ussuri Cossacks also desire to establish a similar school at Station Bikin. They are willing to subscribe a fund of 10,000 rubles (\$5,150) for its establishment and to pay 1,200 rubles (\$618) per annum toward its support, and also grant 500 dessiatines (1,350 acres) of land for the purpose.

Telegraphic communication between Imperial Harbor and De Castries is to be established, according to the Priamursky Vedomosti. The only stations of importance on the Russian shore of the Japanese Sea and the Tartar Straits at present are De Castries and St. Olga. In 1911 the line was completed up to Sizimi Bay, a distance of 57 miles. The length of the entire line will be about 220 miles. Another line is to be constructed from Cape Pogibi to the village of Ribnoe, on Sakhalin Island.

Government bank desired.—A Russian paper reports that, in order to avoid a trade depression, particularly in the fishing industry, the governor general has again approached the Minister of Finance with a request for the establishment of a Government bank at Nikolaiefsk. A previous request for such a bank met with the reply that its opening would be premature and an offer to enlarge the activities of the local Government treasury. In the meantime, the local branch of the Russo-Asiatic Bank received instructions to diminish the credit extended to local firms, which resulted in much concern among the local merchants, who applied to the governor general for assistance.

BRITISH BANK OF SOUTH AMERICA.

A press résumé of the annual report of the British Bank of South America (Ltd.) for 1911 states that the 10,000 new shares offered in March of last year were fully subscribed and that the amount called up, \$500,000, was added to the bank's reserve fund, raising the total thereof to \$4,000,000.

The gross profits for the year, after allowing for rebate of interest on current bills and drafts, for interest on deposits, and making full provision for bad and doubtful debts and contingencies, are said to have amounted to \$1,951,330, to which should be added the balance brought forward, \$334,360. After deducting all charges of the head office and branches (\$775,515) and income tax and Government taxes in Brazil and the River Plate country (\$74,860) there remained \$1,435,315 available.

About \$250,000 of this sum was transferred to the reserve fund. No deduction was necessary for depreciation of capital employed in South America, but \$100,000 was transferred to the bank-premises account, reducing the amount thereof to \$629,600; \$50,000 was carried to the pension and benevolent fund, which, with interest at 5 per cent, now amounts to \$334,150; and \$35,000 was set apart for payment of a bonus to the staff. A dividend of \$2.90 per share was paid in September, 1911, and a further dividend of a like amount and a bonus of \$2.45 per share, both free of income tax, was recommended, making for the year a distribution of 17 per cent, free of income tax, on the paid-up capital of \$3,649,875.

The lease on the bank premises in London has been renewed for 80 years and one effected for adjoining real estate whereon a new building is being erected. The steady and continuous development of the bank's business and the progress which has taken place in the countries where it is established may, it is stated, in the near future make an increase in its capital desirable, and action along this line may be taken by its directors.

NOTES FROM EASTERN AFRICA.

[From Consul Alexander W. Weddell, Zanzibar.]

Faster mail service.—Owing to the development of the German East Africa Central Railway, from Dar-es-Salaam, mails from the coast reach Ujidji, on Lake Tanganyika, in 20 days.

New bank opened.—Local newspapers announce the opening at Tanga, German East Africa, of a branch of the Handelsbank of East Africa. This bank has been formed in Berlin with a capital of 3,000,000 marks (\$714,000).

Busoga Railway.—Following a notice issued by the Governor of the Uganda Protectorate, the newly opened railway line from Jinja, on Lake Victoria, to Kakindu and Namasagali, toward Lake Kioga, will be known as the Busoga Railway. The formal opening of this railway took place on January 1, 1912. Since that date two steamers, a tug, and several lighters, have been shipped in sections to Kakindu, where they are being put together for use on Lake Kioga. [The announcement of the opening of this railroad appeared in Daily Consular and Trade Reports for Feb. 27, 1912.]

BRAZILIAN BUSINESS NOTES.

[From the South American Journal.]

City improvements.—The municipality of Cruzeiro, Sao Paulo, proposes to negotiate a loan of \$100,000 gold for the repurchase of its debt and to cover improvement works.

Railway shops.—The Paulista Co., it is stated, has sold to the Sao Paulo Railway its workshop of Jundiahy for \$320,000, and has established its new workshops at San Carlos.

New bank, tramways, etc.—A French capitalist, M. Homolle, is in Cuyoba, capital of the State of Matto Grosso, with a view to establish a bank and to acquire several concessions and enterprises, notably the contract for the tramways of that town.

Railway line.—Engineer Brant Carvalho had requested from the government of Sao Paulo a concession to construct a railway line which will join the Alto da Serra to S. Bento de Sapucahy, passing through Mogy das Cruzes.

Patents.—Senhor Soraes, jr., General Director of Industry and Commerce, who had been sent to Europe to study the service of granting of patents and provisional patents, had been charged by the Minister of Agriculture to elaborate the law which will be submitted to Congress in order to insure its conformity with international conventions.

Foreign trade.—The value of the exports from Brazil during 1911 amounted to \$325,271,468, as compared with \$310,006,438 in 1910 and \$308,331,829 in 1909. The value of the imports into Brazil for 1911 was \$256,941,545, as compared with \$235,574,837 for 1910 and \$179,690,125 for 1909. During 1911 the value of the following exports increased over that of the previous year: Coffee by \$71,711,076, cacao by \$1,296,985, and cotton by \$404,835, while rubber decreased by \$48,851,816, and tobacco by \$3,197,205. The value of the excess of exports over imports during the last three years has amounted to \$271,403,228.

Railroad ties.—The lack of available labor in this country is exemplified by the fact that recently the Madeira-Mamore Railway imported no less than 100,000 sleepers from Australia. When it is considered that the line runs through forests where there are over 200 varieties of trees this seems rather singular. The company, however, maintains that it is cheaper for it to import as stated than cut down trees and make sleepers on the spot, owing to the fact that labor is scarce and dear. A London contemporary recently remarked that Brazil, which is one of the richest timber countries in the world, is also a large importer of that commodity.

[From the Brazilian Review.]

Bank notes.—The American Banknote Co. embarked eight cases of notes for the Caixa de Amortisação on the steamship *Verdi*. The notes consist of 250,000 of 10\$000 and 150,000 of 50\$000 each (value \$3.24½ and \$16.22 each in American currency).

Flour.—Canadian flour shippers are likely to find an active competitor in the Argentine Republic, which is making a bold bid for the flour trade of the West Indies. In the Bluebook of Barbados for 1910-11 Argentine flour appears for the first among the imports. The Argentine Republic supplied Barbados with 3,751 barrels of flour, while the United States furnished the island with 47,400 barrels and Canada with 29,660 barrels. Argentine flour was also delivered in Trinidad last year. Several steamship lines, including the Booth Steamship Co., Lamport & Holt, the Lloyd Brasileiro and the Houston Line, call at one or more of the West Indian islands on their voyage between South America, New York, and Boston.

KRUPP PURCHASE OF NORWEGIAN ORE.

[Press dispatch from Christiania.]

The great Krupp Iron Co., of Essen, Germany, has appeared on the industrial horizon of Norway. The Dundert Iron Ore Co., founded in 1892 to work the large ore deposits in Nordland, met with great difficulties, sinking \$11,000,000 of Anglo-American capital. The property embraces nearly 100,000,000 tons of ore. After a prolonged suspension, work again has been begun at the mines, the Krupp company offering to invest \$1,000,000. It is calculated that during the first year 200,000 tons of ore will be produced. Of this amount the Krupp concern wants half and its offer has been accepted. These are the largest mines in Norway and the prospect of their successful operation and expansion is of the deepest interest and importance to the country.

ROUMANIAN STATISTICS.

[From American Minister John B. Jackson, Bucharest.]

The following statistical information just obtained from the Roumanian Ministry of Agriculture may be useful to American manufacturers who wish to increase the exportation of agricultural machines to this country.

In 1911 there were 6,021,168 hectares (hectare=2.47 acres) under cultivation in Roumania, of which about 30 per cent was in farms of an average of 486 hectares, while the remaining 70 per cent was in farms of less than 100 hectares with an average of 3.6 hectares, there being 3,763 farms of more and 1,109,539 of less than 100 hectares. There are several hundred farms ("exploitations") of more than 500 hectares. There are in all 29 agricultural schools or experimental stations. More than 5,000,000 hectares are devoted to the production of cereals, more than 2,000,000 being to corn (maize) and almost an equal surface to wheat.

A Decennial Census.

A law has been passed ordering the taking of a general census of the population of Roumania every 10 years, beginning with 1912, at a date to be fixed by royal decree. The estimated population of Roumania at present is about 7,000,000, based on statistics showing the excess of births over deaths, without taking immigration into account. The last census was taken in December, 1899, and it is contemplated to take the next one on December 14, 1912.

MALAYSIAN RUBBER STATISTICS.

[From Vice Consul General David M. Figart, Singapore, Straits Settlements.]

In a supplement to Grenier's Rubber News particulars are given regarding 67 of Malaya's leading rubber companies, and the following interesting facts have been deducted therefrom:

The capital of the 67 companies is \$25,232,000 (United States currency), with an average issued capital for each of \$376,600. The total planted area is 133,820 acres, or an average of 1,997 $\frac{1}{2}$ acres for each estate. This would give a capitalization value per acre of about \$190.

The total output at 400 pounds per acre will be 53,501,300 pounds, or 798,527 pounds for each estate; at 600 pounds per acre, which is possibly a little too high for an ordinary plantation, the yield will be 80,256,000 pounds, or an average of 1,197,850 pounds. With 1 shilling (24 cents) per pound profit, at 400 pounds per acre, the total profit will be \$12,840,312, or \$191,645 for each estate, giving an earning capacity of 51 per cent. At 600 pounds per acre, the profit will be \$19,261,440, or \$287,474, for each estate, representing an earning capacity on the capital of 76 per cent.

At a meeting of the Planters' Association of Malaya, at Kuala Lumpur, on January 7, 1912, it was decided that the association should be represented in the New York Rubber Exhibition, to be held this year.

Brazil Employs American Agricultural Expert.

The Department of Agriculture announces that Mr. C. E. Craig, an instructor in agronomy at the School of Agriculture of Purdue University, Lafayette, Ind., has been engaged as agronomist in the Polytechnic School at Porto Alegre, Brazil.

New British consulates are urged by the London Chamber of Commerce to be established in Russia at Omsk, Nizhni Novgorod, Novorossisk, Tomsk, Kasan, and Astrakhan.

FREE MARKETS A SUCCESS.

[From American Minister Nicolay A. Grevstad, Montevideo, Uruguay.]

The experiment with free markets established at Montevideo (described in Daily Consular and Trade Reports for February 27, 1912) appears to have met with greater success than was expected by the conservative element of the community. The patronage by the people of small or moderate means has been general and steady, owing to the undisputed fact that some of the staple articles of food, for instance, certain grades of meat, are obtained at the free markets at notably lower prices than those prevailing before these markets were established.

The newspaper *El Tiempo*, of Montevideo, says that the free markets have begun to demonstrate their influence toward lowering the cost of living. Merchants and butchers who did not choose to establish booths in these public markets have found themselves compelled to meet the new competitor by lowering their prices. In an editorial this paper predicts further price reductions as a result of purely private efforts prompted by the free markets. The largest slaughtering house in the city stands ready to furnish cheaper meats in much greater quantities than at present; the retail butchers, by some system of cooperation, expect to reduce their expenses, so that they can sell cheaper, and other organized efforts, backed by men of means, are likely to be made to lower the price of meat to the poorer people. These notable developments are attributable to the competition of the free markets and the lessons they have taught.

It is the prevalent opinion here, expressed also by *El Tiempo*, that the rise in the prices of necessities in recent years has been caused by speculators. Whatever may be the value of this view, it is apparent that the price lowering which the free markets have brought about has been due to the elimination of middlemen's profits; in some instances the services of two middlemen (jobber and city seller) are dispensed with in the handling of articles sold in the free markets, and it is chiefly the consumer who gets the benefit of this saving of costs.

CANADIAN HAY EXPORTED TO THE UNITED STATES.

[From Consul Fred C. Slater, Sarnia, Ontario.]

The exportation of hay from Canada to the United States has increased greatly in the last 2 or 3 years and during the 10 months ended January 31, 1912, amounted to 516,361 tons, valued at \$3,883,155. The Provinces furnishing this hay were as follows: Quebec, 365,182 tons; Ontario, 142,819 tons; New Brunswick, 7,054 tons; Prince Edward Island, 1,245 tons; Nova Scotia, 56 tons; and Yukon, 5 tons. During the same period the United States exported 14,573 tons, valued at \$237,272, to Canada, most of this going to British Columbia and the Yukon Territory. The shipments from this consular district, as indicated by the invoices certified at this consulate, amounted to \$55,397 in 1911, as against \$1,754 in 1910 and \$365 in 1909. The better quality of hay is grown in this part of Ontario and sells for \$12 to \$16 a ton on the local market. With the freight, duty, and profits of the various dealers, the consumer in the United States must pay \$25 to \$30 per ton.

FOREIGN TRADE OPPORTUNITIES.

(Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.)

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8482. Guns and bicycles.**—An American consul reports that a firm in a Mediterranean country desires to be put in touch with some American firm with a view to importing guns and bicycles. Correspondence should be direct with the inquirer and must be in French.
- No. 8483. Corundum.**—A business firm in a European country has written to an American consulate that it would like to communicate with firms in the United States able to supply rock corundum, as well as artificial corundum products. The firm writes that these articles are necessary for it as raw material for the manufacture of emery wheels.
- No. 8484. Currants.**—A currant exporter in Greece informs an American consulate that he desires to secure some reliable American firm to represent him in the United States in the currant trade. Correspondence should be in French.
- No. 8485. Cotton yarns.**—American Minister John B. Jackson, of Bucharest, Roumania, reports that the Roumanian Ministry of the Interior will receive bids until April 16, 1912, for 12,000 kilos of cotton (yarns); 6,000 of No. 12 and 6,000 of No. 10, for use in making military cloth in the prison at Craiova. Detailed information as to the requirements and conditions can be obtained upon application at the "Direction Generale" of the ministry, No. 3, Strade Vasile Lascar, Bucharest, Roumania. The yarn must be of a quality and strength suitable to the use to which it is to be put. While the quantity is small, there is a possibility that through obtaining a contract to supply it useful connections would be established and more important contracts could be obtained in the future if the matter were to be followed up.
- No. 8486. Representation of American firms.**—A business man in England has made known to an American consular officer his desire of obtaining the representation, if possible, of one or more American firms, preferably engineering, for Great Britain. He states that he will furnish satisfactory references; that he has recently terminated an eight years' appointment as manager of the Japanese branch of a British firm, and that he has good connections in England.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 560. Panama Canal supplies.**—Sealed proposals, in triplicate, will be received at the office of the General Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., until April 18, 1912, for furnishing the following supplies, covering the annual estimate for the period ending June 30, 1913: Galvanized roofing, steel rope, nuts, babbit metal, pig iron, pig tin, slab zinc, pig lead, solder, hand cars, push cars, wheelbarrows, shovels, picks, monkey wrenches, pipe wrenches, nails, hack-saw blades, hose clamps, hammer and pick handles, mop handles, corn brooms, stable brooms, scrubbing brushes, lanterns, garbage cans, brass unions, manila rope, cotton canvas, leather, toilet paper, fire clay, rosin, caustic soda, and crude carbolic acid. (Circular No. 693.) Tenders are also invited until April 8, 1912, for supplying hand cars, push cars, nuts, nails, hack-saw blades, hammer handles, cotton waste, manila rope, cotton canvas, metallic brown, and soap. (Circular No. 694.)
- No. 561. Aluminum canteens and cups.**—Sealed proposals, in duplicate, will be received at the Rock Island Arsenal, Rock Island, Ill., until April 8, 1912, for furnishing and delivering at the arsenal 23,085 aluminum canteens and cups, complete, in accordance with specifications and sample, which can be obtained from the commanding officer at the arsenal.
- No. 562. Bituminized fiber.**—Sealed proposals, in duplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until April 8, 1912, for furnishing the Signal Corps one carload conduit, bituminized fiber, orangeburg, 3-inch, socket joint (approximately 25,000 feet), including 20 gallons of coupling mixture. (Proposal No. 577.)
- No. 563. Dredging.**—Sealed proposals for dredging in Connecticut River below Hartford, Conn., will be received at the United States Engineer Office, New London, Conn., until April 16, 1912, and then publicly opened. Information on application to A. E. Waldron, Captain, Engineers.

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FOREIGN COMMERCE OF HAVRE.

[By Consul James E. Dunning.]

The improvements in the port of Havre, France, which, when completed, will cost approaching to \$20,000,000, are advancing satisfactorily.

The undertaking includes the extension of the present port southward into the Seine. The deepening of the main entrance channel is nearly completed, and thus the largest passenger steamers may enter the outer portion of the port at all stages of the tide. The Floride lock was completed and opened for service in October.

Additional Service, Havre to New York—Mail Subsidies.

These enlargements were made necessary to accommodate the new French liner *La France*, which will enter the Havre-New York service early the coming spring. This ship is the largest constructed in France. It is 715 feet 3 inches in length, with a displacement of 27,000 tons, a gross tonnage of 23,000, and with turbines employed as motive power. The *Rochambeau*, another new vessel, began operations between Havre and New York September last.

The mail subsidy granted the Compagnie Generale Transatlantique for its Havre-New York service in 1897 has been continued to the end of the present year. [A copy of the convention accompanied this report.] The mail subsidy granted the French Line for its fast passenger service between Havre, the West Indies, and Mexico was renewed at the beginning of 1911. In consequence, the company announced the laying down of two new fast steamers for this service.

French Merchant Marine.

The total number of steam vessels above 100 tons in the French merchant marine in 1911 was 616, with a gross tonnage of 1,471,333 and a net tonnage of 855,093. There were 281 vessels of 51,642 gross tons under 100 tons. French economists and shipping experts profess considerable anxiety over the condition of the merchant marine,

pointing to the fact that France stands at the foot of the list of nations in number of merchant steam vessels, and being led by Japan, Norway, Germany, England, and the United States.

In November, 1911, the French Senate approved the new law for the autonomy of the great French ports, by which each will be rendered independent of appropriations made for or obligations borne by the others.

The Coffee Market.

The prices of coffee in the Havre market increased considerably compared with 1910. The average price per bag during December, 1910 and 1911, respectively, of the several grades entering into this trade was as follows: Porto Rican, \$17.47 and \$20.94; Malabar, \$16.79 and \$19.40; Mexique, \$15.83 and \$19.69; Port au Prince, \$14.76 and \$17.37; and Rio Superior, \$14.38 and \$17.27.

The total imports of coffee during 1911 amounted to 1,214,416 bags, against 1,574,351 bags the previous year. The exports amounted to 1,525,687 and 1,662,066 bags for the two years, respectively. The stock on hand at the end of 1910 was 2,566,650 bags, against 2,255,379 bags in 1911. Of the total imports of coffee in 1911, 1,897,809 bags were Brazilian, 126,241 bags Haitian, 169,854 bags from Central American countries, and 61,475 bags from India, Ceylon, and Malabar.

Imports and Sales of Cotton.

Conditions in the cotton trade were satisfactory, especially the last six months of 1911. Large supplies of American cotton were received, thus protecting the industry from undue speculation. The large American crop influenced the market prices, as spot cotton sold at \$18.72 per 100 pounds in January, \$19.10 in April, and dropped to \$11.60 in October. Full middling decreased from \$19.25 in January and \$19.83 in May to \$12.16 in December.

The imports of American cotton during 1911 amounted to 1,023,651 bales, against 716,253 bales in 1910 and 1,151,253 bales in 1909. The following table shows the receipts and sales of cotton at Havre during 1910 and 1911 and the stocks on hand at the end of each year:

Countries.	Receipts.		Sales.		Stock on hand.	
	1910	1911	1910	1911	1910	1911
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
United States.....	716,253	1,023,651	996,901	984,448	180,428	219,631
India.....	32,822	22,025	83,268	20,668	1,545	2,157
Other countries.....	34,046	35,959	39,733	31,682	3,024	5,037
Total.....	783,221	1,081,635	1,069,902	1,036,798	184,997	226,825

Market for Lumber—Immigration—Industrial Enterprises.

Havre continues to be one of the important markets of Europe for building and cabinet woods, the trade in which was active during 1911. There was a continuous demand for mahogany, cedar, *lignum-vitæ*, walnut, ebony, tulip, box, and similar woods, the imports (with the exception of rosewood) increasing and the prices advancing. The following were the principal imports of cabinet makers' woods during 1911, in metric tons: Mahogany, 17,601; tulip, 6,421; boxwood, 2,226; ebony, 1,173; pencil wood, 869; *lignum-vitæ*, 701; and maple 605. Pitch pine is the principal North American wood imported, but it reaches the market from British sources.

The number of passengers leaving the port for the United States during 1911 was 60,440, composed of 4,723 first-class, 16,839 second-class, and 38,878 third-class passengers. Those arriving at Havre from the United States numbered 42,606, consisting of 4,194 first-class, 7,899 second-class, and 30,513 third-class passengers.

The only manufacturing establishments of importance in the city of Havre are the building of torpedo vessels and other small steamers, the manufacturing of guns, armor plate, and electrical appliances, and the canning of American salmon and other foods, the latter being an American enterprise recently started.

Revenue from Government Railway.

The deficit of the Western State Railway, owned by the Government, and the line which connects the Havre district with Paris and central Europe, amounted in 1911 to about \$12,000,000, as against \$8,000,000 during 1910 and \$3,000,000 during 1909, which was the highest mark reached under the private ownership relinquished to the State in 1909. There was, however, a large increase of revenue, against which large sums were expended for improvement of permanent way, rolling stock, higher wages, pensions, and employees' indemnities. An extensive scheme of terminal improvements and suburban electrification is in progress by the Government.

The project for a second railway line between Havre and Paris is being energetically advanced by the chamber of commerce, and in consequence is likely to materialize. More than 70 per cent of the French goods shipped to the United States goes via Havre and at times the railway facilities are inadequate.

Exports to the United States—American Horses.

The total exports to the United States invoiced through the Havre consulate during 1911 were valued at \$3,184,192, a slight increase over the preceding year. The following were the principal articles for the two years:

Articles.	1910	1911	Articles.	1910	1911
Aeroplanes.....	\$1,686	\$7,992	Horns, ox.....	\$12,134	\$4,085
Alimentary pastes.....		57,758	Horses.....	95,376	70,723
Antimony.....	72,733	58,829	Liquor: Benedictine.....	96,195	115,437
Automobiles and parts.....	5,970	1,666	Macaroni.....	66,759	
Balloons.....		2,027	Oils:		
Bristles.....	6,428	64,499	Colza.....	41,187	59,193
Bronze, sheet and ingots.....	1,409	10,685	Peanut.....	15,308	1,731
Casain.....	37,648	23,971	Oleostearin.....	16,919	7,209
Cheese:			Pebbles, flint.....	75,020	42,478
Brie.....	5,216	3,575	Pepper.....	3,760	17,299
Camembert.....	176,472	215,638	Quartz.....	219,664	
Pont l'Evêque.....	4,636	5,028	Rubber, crude.....	1,289,780	1,649,120
Providence.....	2,523	2,769	Seeds:		
Roquefort.....	18,883	1,324	Clover.....	82,683	61,751
Other.....	8,252	4,266	Hemp.....		12,285
Cocoa.....	34,862	82,437	Vegetable.....		10,521
Copper, ingots and scrap.....	48,922	1,477	Shells.....	12,074	22,494
Cordage, old.....	16,317	110,294	Thread.....		13,338
Drugs.....	240	10,013	Tin ingots.....	6,601	67,012
Dyewood extracts.....	84,694	15,734	Trees and plants.....	35,063	54,847
Feathers, culture.....	56,550	30,229	Wine.....	7,599	7,338
Furniture, antique.....	922	15,641	Wood, ebony.....	6,935	20,848
Glycerin.....	59,758	12,014	All other articles.....	157,315	23,238
Hides and skins:			Total.....	3,033,774	3,184,192
Cow.....	63,942	99,361			
Goat.....	85,411	36,028			

Although no shipments of quartz gold to the United States are credited for 1911, the usual quantity was exported. These exports

go to England and are transshipped to the United States, therefore are credited to the last port of departure. Although the value of the cheese shipped during 1911 was greater than for the previous year the quantity was smaller. The increased value was on account of the foot-and-mouth disease among milk-producing cattle.

During 1911 considerable shipments of American horses were made into France for breeding and racing. These stables are brought into the country on account of the decline of racing in the United States, and toward the end of 1911 plans were made to find permanent farms for these animals in the Havre district.

Statistics showing the imports from the United States into the port of Havre will not be available until later in the year.

NEW SYSTEM FOR GENERATING GAS.

(From Consular Agent U. W. Burke, Fremantle, Western Australia.)

The "Autogene" air-gas system, invented by P. C. Booty, of Perth, Western Australia, is a device for manufacturing gas from gasoline and air—98 per cent air and 2 per cent gasoline vapor.

The apparatus is simple, consisting mainly of a patent valve and carburetor by means of which gas of uniform quality is automatically supplied to the service irrespective of the fluctuation of the load. No more gas is generated than is needed for immediate consumption. Connected to the valve is an air pump of simple form surmounted by a gasoline tank and air holder. The pump may be operated by a weight-driven, electric, or water motor, or by a hot-air motor supplied with gas from the system.

The gas produced is not poisonous, and as there is no storage of gas the insurance companies do not charge extra premiums. The mixture is used for lighting, heating, and power purposes. The light is said to be white and of a very good quality, and there is a total absence of smoke or smell. As the system supplies its own air there is no depletion of oxygen in the room where the gas is being consumed. The outfit is capable of producing 1,200 cubic feet of gas for each gallon of gasoline used.

The system seems suited for a variety of purposes, such as laundry work, mining, metallurgy, laboratory work, heating, and cooking. It makes it possible for a family living far from a gas works to enjoy the advantages of a gas ring, griller, gas stove, bath heater, etc.

Electrical Exhibition at Boston.

Under the auspices of the Edison Electric Illuminating Co., of Boston, Mass., an electrical show will be held in that city in the Mechanics Building from September 28 to October 26, 1912. The exhibition is to be held solely for educational purposes, and practically all the electric lighting companies in New England will take an active part in the enterprise. It is also expected that foreign manufacturers in the electrical field will be represented at the show, either by exhibits of machinery or by displays of catalogues, illustrations, and other literature, for which space will be allotted. Further information in regard to the exhibition may be obtained by addressing H. W. Moses, manager, 1912 Boston Electric Show, 39 Boylston Street, Boston, Mass.

CONSTRUCTION WORK ABROAD.**CANADA.**

[From Consul General David F. Wilber, Vancouver.]

Opportunities from British Columbia Construction Enterprises.

Firms in the United States which desire to take advantage of the building activity in British Columbia for the sale of construction supplies or equipment are again urged to secure personal local representation here. This is particularly necessary in the case of manufacturers of material, devices, or equipment for use in construction work. At the time that news of most of the building enterprises becomes public here, and especially before the announcement can be made in Daily Consular and Trade Reports, local dealers have usually arranged to place their lines. Those at a distance are usually prevented from bidding, where tenders are called for, by the very short period that generally intervenes between the call for tenders and the closing of tenders, both on public and private works, even should they be promptly advised.

A great deal of building is going on in Vancouver. During February the permits in Vancouver alone were 270 for buildings of the value of \$1,200,740, as follows: Offices and stores, \$423,235; apartments, \$305,605; factory and warehouses, \$152,535; dwelling houses, \$292,105; repairs, \$27,260.

How American Equipment May Be Introduced.

Many American devices and specialties used widely in the United States and having much to commend them are unknown here, to judge by their absence from new buildings and from the advertising and displays of hardware and other dealers. A vigorous campaign inducing local building supply dealers to "feature" these specialties and architects to include them in the building plans seems to me to be the only way of getting a proper share of the opportunity that exists. Probably too much emphasis can not be given to the point that architects should be interested. They have the very best occasions to exhibit such specialties to the persons who intend to build. It is unnecessary for them to commend or advance any particular make of article, but they can prevent the builder of a house or other structure from not incorporating, either through ignorance or by oversight, devices that would increase the building's usefulness, convenience, or comfort to the owner or add to strength or beauty of the building. A list of the local architects has been forwarded and may be had from the Bureau of Manufactures by any American concern interested. I would suggest, however, that, if possible, salesmen should call on the architects rather than attempt to interest them by mail, and that the activity of the architects and dealers in building supplies should be carefully "followed up." This may cause incommensurate expense at first but will pay in the long run. Direct personal representation is highly desirable, even though articles may be sold partly or entirely through jobbers, to "jog" the salesman from time to time, to arrange for concerted and efficient display and advertising, and to prevent other makes being substituted.

While this is less true of machinery and some sorts of expensive equipment, it is a plan of much merit even for such lines. I have noticed that the firms whose goods are used locally are the firms

which have local, tax-paying members of the community interested in their sale. Several American firms which are following the plan outlined (from their nearness to the market and the efficiency with which the plan is carried out) have driven their English and other competitors from the field in their respective lines.

One of the most successful representatives of an American line here, though his product is sold only through the jobbers, spends all his time in the field calling on the retail dealers and others interested, getting their orders (to be filled by the jobbers), arranging for public displays, advertising, etc., concertedly by the different retailers, for which his firm furnishes advertising, display cards, free samples, etc., and seeing that no complaints regarding the goods or the methods of the firm are allowed to pass unattended to or unexplained. The competition he met at first was keen. Now he practically has the field to himself.

In all the lines connected with building, the British Columbia field could be profitably worked by many American firms who have heretofore given it little or no attention, if they go after the business in a vigorous manner and along proper lines. Some suggestive trade notes follow:

Smelter.—F. M. Sylvester, assistant general manager of Granby Consolidated Mining & Smelting Co. (Grand Forks, British Columbia) is quoted as stating that the proposed smelter at Goose Bay, British Columbia, will be built this spring for treating northern British Columbia and southeastern Alaska custom ores, besides the company's Hidden Creek copper-gold ore.

Paper mill.—It is stated that C. B. Pride and associates, of Spokane, Wash., have definitely announced that they will erect a \$300,000 pulp and paper mill at Nelson, British Columbia, which is to have a capacity of 35 tons daily, manufacture envelopes, paper boxes, etc., in addition to pulp and paper, employ 300 hands, and be operated by electrical power generated from the Kootenay River by a \$100,000 power plant which they will erect.

Railway.—It is announced from Prince Rupert that the Pacific and Peace River Development Syndicate is to start building a railway this summer from Dunvegan to Bella Coola, over the shortest route from the Peace River district to the Pacific, to be completed within two years.

Sand and gravel plant.—It is reported that the Port Moody Sand & Gravel Co., of Port Moody, British Columbia, will establish a rock quarry, sand and gravel bunkers, wharves, crushers, pumping plant to obtain sand from the bay, etc., at that place, to be operated by electric power supplied by the Western Canada Power Co., of Vancouver.

Municipal telephones.—It is stated that Penticton, Summerland, and Kelowna, British Columbia, will establish municipal cooperative and automatic telephone service in place of or in addition to the Okanagan Telephone Co. (Mr. Ronnie, secretary, New Westminster, British Columbia). A. L. Moreland, of the Summerland Board of Trade, appears in the reports as one of the movers for the new service.

Cable telephone line.—It is stated that President Farrell, of the British Columbia Telephone Co., will let the contract for a two-pair \$150,000 submarine telephone cable, to connect Vancouver and Nanaimo (30 miles distant), to an English firm.

Telephone train dispatching.—It is reported that the Canadian Pacific Railway is proceeding rapidly with its plans for train dispatching on its western lines by telephones.

New telegraph lines.—Of 4,500 miles of new telegraph lines to be strung by the Canadian Pacific Railway Co.'s telegraphs, about 1,000 miles will be in British Columbia.

Oil fuel.—Not only is oil-burning installation being made on the Grand Trunk Pacific Railway and Canadian Pacific Railway coastwise steamers, but the latter road is planning to use oil as fuel on its western railway lines. Locomotives equipped for oil fuel for the Esquimalt and Northern subsidiary line (on Vancouver Island), it is reported, are to be supplied shortly.

Oil tanks.—The Canadian Pacific Railway will erect a 40,000-barrel oil tank at Esquimalt, British Columbia, for fuel for the Esquimalt & Northern Railway.

Electrification.—It is rumored that the Canadian Pacific Railway Co. will electrify its line between Castlegar Junction and Rossland, British Columbia, a representative

of the General Electric Co. having assisted in the investigation, and that tenders have been called for.

Substation.—It is rumored that the British Columbia Electric Railway is planning a \$100,000 power substation at the intersection of Earl's Road and its New Westminster interurban line.

Gas plants.—The North Vancouver Gas & Coke Co. (North Vancouver, British Columbia) and a London, England, firm are seeking a franchise from that municipality for establishing a gas-lighting system, and action is pending. The city of New Westminster is considering a by-law appropriating a sufficient sum to establish a municipal gas plant. I understand that there are a number of towns in British Columbia which could support gas plants or other lighting systems.

Power plant and laundry.—Building permits have been issued for a \$120,000 structure for the Hotel Vancouver, to house a power plant and laundry.

Laundry.—The Victoria Steam Laundry, Victoria, British Columbia, is erecting a new laundry.

Bed factory.—It is reported that the Dominion Bed Manufacturing Co., which has a branch in Kent, Wash., will soon establish a branch factory here, capacity about 250 beds per day.

Brass works.—The British Columbia Brass Works (Ltd.), capital \$40,000, of New Westminster, British Columbia, is to erect a small plant.

Sawmill.—It is reported that the Canadian United Lumber Co. (Ltd.) will immediately erect and equip an electrically driven modern saw and planing mill at Coquitlam.

Machine shop.—A \$40,000 machine shop equipment is to be bought for the city of Vancouver water system, under the direction of Superintendent Maddison.

Fishing vessels.—It is reported that A. L. Hager, western manager of the New England Fish Co., of Boston, Mass., who will leave shortly for Boston, will purchase two fishing boats of the *Gloucester* type, about 125 feet over all, 25-foot beam and 12-foot draft, equipped with heavy service auxiliary gas engines.

New ferry.—Plans and specifications have been presented at North Vancouver for the new ferry steamer and wharf amounting to \$156,000; \$130,000 to be expended on ferry No. 4, the construction of which will be commenced on June 1 and completed before May 1, 1913.

Motor fire equipment.—Nanaimo will probably adopt a by-law appropriating \$15,000 for motor vehicles for its fire department. Presumably tenders will be called for.

[From Consul Abraham E. Smith, Victoria, British Columbia.]

Building Progress in Victoria.

The bank returns and building permits for January and February show that the remarkable growth of Victoria is likely to be continued during 1912, and that the figures will exceed those even of the past two years. Statistical comparisons follow:

	Bank clearances.			Building permits.		
	1910	1911	1912	1910	1911	1912
January.....	\$7,390,767	\$9,013,716	\$11,902,519	\$128,985	\$151,455	\$319,885
February.....	6,404,570	9,078,881	12,610,627	151,790	182,940	1,671,070
Total.....	13,795,337	18,092,597	24,513,146	280,745	334,395	1,990,955

Plans are out for the new large seamen's home near the ocean wharf, with accommodations for 30 or 40 seamen. While erected under the auspices of the British and foreign sailors missions, it will be open to seamen of all nationalities.

Contract has been awarded to Parfitt Bros. for the new Anglican St. John's Church on Quadra, cost, including electric and plumbing fixtures, over \$100,000. Excavation and basement walls are completed, the edifice to be finished in October. The indirect heating and ventilation systems will be used.

A \$17,000 apartment house, with stores, has been commenced. The contract for the new \$373,000 high school has been let to a local company, the electrical work costing \$17,700 and plumbing \$11,500,

while an 8-room \$25,000 school building has also been ordered. The Sound Construction Co., of Seattle, has secured contract for a \$100,000 4-story store and office structure with basement, for Dr. O. M. Jones.

The Grand Trunk Pacific Railway Co. has ordered 10,000,000 feet of lumber, mostly bridge-building material, from the Victoria Lumber & Manufacturing Co., of Chemainus, for delivery in Manitoba. The order will fill 50 cars and will be shipped chiefly by the Great Northern.

Considerable interest has been aroused in Victoria by the announcement that the Canadian Pacific Railroad is to be double-tracked between Spences Bridge and Hope, from which latter point the double track will be later continued to Vancouver. The proposed improvement as already laid out will involve an expenditure of \$20,000,000 to \$25,000,000, and the work, it is understood, will be commenced this autumn.

[From Consul R. S. Chilton, Jr., Toronto.]

Competitive Plans for Technical School.

The board of education invites competitive plans for a new technical high school to be built in Toronto. The competition is restricted to architects or firms of architects practicing in Canada; \$1,000 will be paid to the winner of the competition, to be merged in the amount of the commission when the work goes on, while \$800 is to be paid for the second and third best designs. The architect will receive 5 per cent commission on the whole cost of the building proper as distinct from the engineering work.

The site is 300 by 813 feet, and the building is not to exceed 220 feet in depth. It is not to exceed 5 stories in height. A severe, practical, and dignified treatment of the exterior is desired. Great weight will be given to the question of disposition of glass area of window and roof lights.

The building will be used for a night school as well as a day school for both sexes. The building is to contain classrooms, lecture rooms, laboratories, workshops, drafting rooms; gymnasium, baths, administrative offices, power plant, coat rooms, locker rooms, lavatories, and other necessary accessories, and must be thoroughly fire-proof. It is intended to expend about \$900,000 in the building and equipment. Intending competitors should address Dr. A. C. McKay, principal, Technical High School, Toronto.

Tenders for materials and construction will no doubt be invited in due time. A copy of the printed report of the advisory industrial committee, giving full particulars of the competition is forwarded [and will be loaned to those interested by the Bureau of Manufactures].

[From Consul Harry A. Conant; Windsor, Ontario.]

Many New Buildings and Factories.

With new buildings valued at more than half a million dollars already in prospect, Windsor contractors are preparing for the opening of the season in the expectation that the total volume of building for 1912 will far exceed that of any previous year.

Among new buildings are business blocks with an estimated value of \$150,000. Most important is the \$80,000 Masonic temple building, for which ground will soon be broken. A \$50,000 business block is contemplated, and contracts have been awarded for two smaller blocks and another at \$9,000.

Work is about to start on a \$50,000 public school and St. Alphonse's separate school, to cost \$35,000, while a \$30,000 academy has been decided on by the Ursuline Sisters.

It is estimated that \$300,000 will not cover the cost of new residences for which plans are already being made. One building company alone is to erect 150 houses and another 75 houses. In the east end of the city alone 100 houses are to be built this spring on new streets opened last year.

Many new factories will be erected. A new \$75,000 plant is planned by Frederick Stearns & Co., and construction will follow a public vote March 28 on the granting of customary exemptions for this factory and a new factory which is being built by the Canadian Sirocco Co., a branch of the American Blower Co.

[From report of British Trade Commissioner for Canada.]

New Railways in Alberta.

The provincial government of Alberta is planning to guarantee bonds for over 1,600 miles of railway for that Province. Of this construction 1,405 miles will be built by Canadian Northern Railway branch line companies holding charters from provincial or Dominion governments. The guaranteed lines of railways will cover the Province with a network extending from Fort McMurray, in the northeast, and Peace River Landing, in the northwest, to Pincher Creek, in the southwest, and the international boundary south of Medicine Hat.

DANISH WEST INDIES.

[From Consul C. H. Payne, St. Thomas, supplementing report in Daily Consular and Trade Reports for Feb. 23, 1912.]

Proposed Harbor Works at Charlotte Amalie.

For the contemplated improvements in the harbor of Charlotte Amalie, a portion of the eastern section of this harbor, estimated at 6,000 to 8,000 square feet, has been ceded by the Danish Government to a syndicate of Danish capitalists. Extensive improvements are contemplated, such as dredging, building strong walls, warehouses, piers, coal yards, ice and electric plants, and all necessary facilities for accommodating ships and cargoes in large numbers and quantities. The preliminary work, such as sounding, surveying, and mapping the area, is now in progress. So far as can be learned here, it is the purpose as soon as this work is completed and plans and specifications made which will be accomplished within the present year, to give contracts for portions of the work so as to have it ready for the anticipated increase of trade when the Panama Canal is opened. The East Asiatic Co. (Ltd.) is the local representative of the syndicate that is reported to contemplate the expenditure of \$6,000,000 or \$7,000,000 upon this work.

ASIATIC RUSSIA.

[From Consul John F. Jewell, Vladivostok.]

Improvement of Port of Vladivostok.

The Russian Minister of Trade and Industry has, with a few minor changes, approved the project for improving and enlarging the Vladivostok commercial port. The project refers to improvements both in "Golden Horn" Bay and in "Amur" Bay (harbor for junks).

The first part of the project provides \$2,800,000 for a wharf 300 feet long between Yegersheldt and the Volunteer Fleet wharves and lumber yards on Cape Churkin. In connection with this a railroad

line will be built from Pervaia Retchka (First River) via Gnilyo Ugol to the southern shores of "Golden Horn" Bay, and surveying the same will begin early in the spring of 1912.

The complete project for improving the port contemplates the expenditure of about \$10,000,000 in enlarging the area, the construction of a floating commercial dock, wharves, repair shops, warehouses, and a naval hospital, which will be done as soon as possible.

It should be noted also that, in order to cope with the increasing commerce and importance of the port of Vladivostok, two new ice breakers have recently been ordered by the Government, and that they will be constructed at the Baltic works.

BELGIUM.

[From Consul General Henry W. Diederich.]

Port Improvement at Antwerp.

A plan for making Antwerp the largest port in the world is embodied in a bill which the Belgian Government has laid before the Parliament at Brussels. The plan calls for the betterment of the course of the River Scheldt by rounding off the sharp bends within 5 miles downstream from Antwerp, and is a modification of the project of 1905. The Antwerp side of the river is to be thrown back and curved so as to present, with the existing quay system, a regular concave water front about 9 kilometers (5.59 miles) long, leaving the existing inner dock system intact. The left bank is also to be thrown back into another curve a little farther downstream. There is nothing to prevent the building of the river walls at once, and if this is done they may be completed in four or five years. The total length of the proposed deep-water quays along the river front may be carried to 10½ miles.

[A map and more detailed description of the proposed harbor improvement may be obtained from the Bureau of Manufactures. Articles upon the improvement of Antwerp's harbor appeared in Daily Consular and Trade Reports for Nov. 5, 1908, Feb. 14, 1911, and Feb. 12, 1912.]

AUSTRIA-HUNGARY.

[From Zentral-Anzeiger für das öffentliche Lieferungswesen, Vienna.]

School Building—Factory—Canals, etc.

The town council of Vienna has approved plans for a large mixed school in the fourteenth district to cost \$200,000.

A \$1,000,000 company has been formed, under the regis of the Anglo-Austrian Bank, for erecting a sugar factory in Cservenka, Hungary. Work is to be begun in the autumn.

Among a number of irrigation and canalization concessions granted by the Mähren Landtag are the following: Banking up the Moschtienitz and the Bystrziczka, cost \$500,000; damming the Luhatschowitz, \$100,000; regulating the Rivers March and Thaya, \$900,000; for constructing a dam in the communal districts of Plamenau and Stichowitz, \$500,000; regulating the Zwitta in its upper reaches, \$3,300,000.

SERVIA.

[From Nachrichten für Handel, Berlin.]

Many New Buildings Planned.

Proposals for allocating the following sums for the purposes indicated have been discussed in the present session of the Servian Skupschina at Belgrade: University requirements, including erection of a building for technical section, \$156,000; build-

ing a national library, \$78,000; building for the Academy of Science, \$40,000. The following further grants have also been proposed: Erection of a gymnasium, \$50,000; other school requirements, \$150,000. From the sanitary funds are allocated: Lunatic asylum, \$310,000; completion of public hospital in Belgrade, \$545,000; erection of a hospital in the interior, \$545,000; and for improvements at three Servian spas, \$136,000.

EGYPT.

[Reuter dispatch from Cairo.]

Million Acres to Be Reclaimed.

The Council of Ministers has approved the Lower Egypt drainage scheme, involving the reclamation of 950,000 feddans (978,500 acres) during the next four years, at a total cost of \$12,500,000. The first sod in the operations was cut on March 23 at Inshab in the presence of Lord Kitchener, the ministers, and other eminent persons.

BRAZIL.

Establishment of Iron and Steel Industry.

A decree has been passed in Brazil which grants power to Mr. A. Thun, or to a company which he may form, to establish in the municipal district of Ouro Preto, Minas Geraes, blast furnaces capable of producing 50,000 tons of pig iron annually, this amount to be increased by 10,000 tons until a yearly capacity of 100,000 tons is reached. The plant is also to be suitable for the manufacture of rolled iron and steel. The contract provides for the granting of certain State privileges for the encouragement of the iron and steel industry in Brazil. [An article giving details of concessions offered by the Brazilian Government for the exploitation of the iron and steel industry there appeared in Daily Consular and Trade Reports for Apr. 8, 1911.]

ARGENTINE TRADE NOTES.

[Compiled by Consul General R. M. Bartleman, Buenos Aires.]

Buenos Aires' population on January 31, 1912, was estimated at 1,365,806.

Sugar.—It is officially stated that there were in operation in the Province of Tucuman in 1911, 29 sugar mills, with an output of 147,181 tons. The price received was \$3 (\$1.27 United States currency) per 10 kilos (22 pounds).

New bank.—A cablegram from New York announces the formation of the Argentine Banking Co., which, it is reported, will have its headquarters in Buenos Aires and a branch in New York. The capital is said to be \$20,000,000 gold.

Subway.—The bill granting a concession to Lacroze Bros. & Co., for constructing a subway from Chacarita to the port of Buenos Aires, has been passed by both houses of the Argentine Congress and will soon be promulgated as a law.

Fewer holidays.—By a decree recently issued by the Argentine Government, four holidays, or feast days, are eliminated from the Argentine calendar. They are February 2, March 25, and the celebration of the feast of Corpus Christi, which this year falls on June 6, June 24, and September 8.

A CARPET FOR ROADS.

[From Consul General John L. Griffiths, London, England.]

A lecture was recently delivered by a member of the road board before the Royal Institution of London on "The road, past, present, and future." The lecturer said the problem was to find the best mode by which a road should be constructed so that its surface would not be broken by traffic, so that the transit might be easier for both passengers and goods, a road which would form neither puddle holes nor exude mud from vehicles and create no dust when the weather was dry. One thing was universally recognized, that the road of the future should be a truly bound road in which, whatever kind of stone was used, the stone should be held together so that it would form a crust.

The lecturer suggested that what he called a carpet or an elastic skin should be adopted as the covering. The carpet, he thought, should be made of bituminous material mixed with sand and placed on the roads in various thicknesses according to the nature of the traffic. It should go on in liquid form, solidifying quickly, but always remaining resilient and compressible, and so integrating with the crust of the road that there could be no shifting of the surface below.

The advantage of such a carpet it was said would be to permanently protect the crust, and just as a carpet on the floor softens the step so would this carpet for the roads silence the noise and reduce the shock of rolling vehicles. It was admitted that the original cost of a road so laid would be more than that of a mud-bound road, but spreading the cost over a series of years it would probably not be so great, since the crust of the road itself would not have to be renewed.

MACHINERY FOR INDIA.

[From the official Indian Trade Journal (Calcutta) of Dec. 14.]

It is often difficult for a local capitalist in India to obtain the expert advice and assistance needed for estimating the requirements for and cost of a plan for any given purpose. In recent years, however, the central Government and certain of the provincial governments in India have appointed officers, one of whose functions it is to procure and supply information of this kind. These officers report that they receive many bona fide inquiries from persons qualified financially and by intelligence to establish useful works; and the article suggests that manufacturers would do well to get in touch with the officers and assist them with estimates and quotations.

In a country such as India it is necessary to direct the attention of an inquirer such as indicated to openings for the development of the country's resources and to assist him to consider the questions of raw material and of demand for the finished product before he is ready to concern himself with the plant required for the industry. Again, different manufacturers make different parts of a plant, and quotations for one part have no practical interest for the would-be works owner in the absence of quotations for the other parts. These are mentioned as some of the causes why the efforts of agents and travelers of British machinery manufacturers often give somewhat disappointing results.

The article finally suggests that manufacturers, when supplying estimates for part of a plant, should get into touch with makers of complementary parts, who might furnish similar estimates for the rest.

British South African trade in January made a good showing for the new year. Imports were valued at \$17,500,000, or \$1,000,000 more than in January, 1911, while the \$26,500,000 worth of exports were \$1,900,000 greater.

FOREIGN TARIFFS.

CHILE.

[From Diario Oficial, Chile, Feb. 13, 1912.]

Changes in Rates of Import Duty.

The Government of Chile has passed a law changing in many respects the existing rates of customs duty, most of the changes being in the way of an increase. Some of the increased rates are to remain in effect permanently, and others are imposed merely for a term of three years; the higher duties have been enacted for the purposes of reducing the State debt. The law goes into effect April 13, 1912.

All articles dutiable *ad valorem*, included in articles 1 to 5 of the tariff law of December 23, 1897, are made subject to an increased duty of 5 per cent of the official valuations specified in the tariff. All articles dutiable at specific rates included in article 6 of the tariff law of December 23, 1897 (excepting only sugar and wheat flour, included in Nos. 7, 8, 9, 10, and 18 of that article), are made subject to an increased duty of 10 per cent of the rates specified in the tariff. The law provides that these increases in the specific rates and in the *ad valorem* rates shall remain in force for the period of three years from the date they become effective.

All articles enumerated in article 7 of the tariff law of December 23, 1897, as free from customs duty, are by the present law made subject to a duty of 5 per cent of the official valuations specified in the tariff for such articles, with only the following exceptions: Print paper without size, and the articles included in the following numbers of article 7 of the tariff law of 1897: 5, 19, 20, 32-34, 36, 47, 48, 56, 59, 71, 81, 82, 84, 85, 93, 95, 103-105, and 116 (altars, reliquaries, ornaments, sacred vessels, and other objects intended for religious services, when imported by the religious associations, monasteries, or churches by which they are to be used; coal; maps, plans, etc.; effects of foreign diplomatic agents and of Chilean diplomatic agents returning from abroad; armament imported by the Government; travelers' baggage; flotsam and jetsam; fresh fruits; implements and parts thereof, not otherwise dutiable in the tariff, for use in agriculture, mining, fine arts, trades, and manufacturing; yarns of vegetable fiber or wool for weaving; printed books, catalogues, etc.; Chilean coins; immigrants' household effects; samples that would be subject to a duty of less than 2 pesos; gold dust and ingots; crude petroleum; fishery products of Chilean vessels; cotton seed; plowshares; copra; and wheat); also pack mules; beasts of burden for travelers; yarn for weaving cotton fabrics and machines for use in cotton mills, the free importation of which is provided for, by a special law, for a period of 22 years from 1898; and all other articles entitled by special legislation to free importation for a determinate number of years. The duty thus imposed on articles enumerated in the free list in the tariff act is permanent.

The stipulations relating to customs duties existing in any Government contracts remain unaffected by the provisions of the present law.

Duty on Automobiles.

By the law of February 13 the rate of duty applicable to automobiles is fixed at 15 per cent *ad valorem* instead of the rate of 60 per cent *ad valorem*, which the customs authorities have been collecting

on automobiles under the general classification of vehicles. (See Foreign Tariff Notes, No. 5, p. 137.)

Tariff of Magallanes.

The law provides that the tariff of Chile shall be in force in the Territory of Magallanes for the following articles: Bran, mineral water, pepper, alcohol, spirits of wine, liqueurs, brandy (sweetened or not), starch, vetches, playing cards, barley, beer, cigars and cigarettes, pickles, brooms and brushes (except nailbrushes and toothbrushes), vermicelli, beans, dried fruits, fruits preserved in their juice or in alcohol, crackers and biscuits, flour of all kinds, condensed milk (sweetened or not), vegetables (fresh, dried, or preserved), wood, corn, butter, potatoes, fodder, cheese, common salt, sole leather and tanned hides and manufactures of leather (with the exception of leather belting for machinery), tobacco in the leaf or cut, vinegar, and wines.

The Government is authorized to spend 200,000 pesos for the establishment of a customhouse at Punta Arenas.

COLOMBIA.

[From Diario Oficial, Colombia, Dec. 12, 1911.]

Admission of Samples Through the Parcel Post.

The Ministry of the Treasury of Colombia, in response to inquiry, has given a ruling on the customs regulations for the free admission into the country of samples coming through the parcel post. The decision is that only such samples, imported through the mail, shall be admitted free of customs duty, as small pieces of cloth or other matter which can easily be cut off and which shall not be fit for use. This explicitly excludes single gloves, single stockings, and single shirt cuffs unless such articles shall have been so mutilated as to render them unfit for use.

The question arose because certain importers, claiming that gloves, etc., imported singly by parcel post were entitled to free entry as samples, were thus seeking to evade the payment of the customs.

[From Diario Oficial, Colombia, Dec. 14, 1911.]

Customs Duty on Wines.

A new schedule of the rates of duty to be collected on wines upon importation into Colombia has been enacted and is to go into effect six months from the date of publication (i. e., June 14, 1912). There are certain changes in the rates of duty and in the customs regulations. [A copy of the new schedule is on file in the Bureau of Manufactures.]

PERU.

[From Nachrichten für Handel, Industrie und Landwirtschaft, Jan. 19, 1912.]

Customs Treatment of Trunks, etc., Containing Samples.

A decree of November 22, 1911, instructs the Peruvian customs authorities to collect duty on trunks and hand bags which contain sample collections. In case the trunks, etc., are in bad condition, proportional reduction of the duty will be made. If the trunks, etc., are reexported within a period of 90 days from the time of their importation into the country, the duty collected will be refunded;

after the period of 90 days no claim for the refund of duty will be recognized. The identity of the trunks, etc., must be established before the duty is refunded.

URUGUAY.

[From Mitteilungen des Handelsvertragsvereins, Jan. 20, 1912.]

Dutiable Goods Sent by Mail.

Dutiable goods sent by mail to Uruguay should not be sent in letters, and should not be sent as printed matter or samples. This rule is frequently broken by those unfamiliar with its existence. The postal authorities refuse to deliver all parcels of samples and printed matter containing dutiable goods (including parcels with more than five private post cards, visiting cards, colored engravings, etc.), and sealed letters containing dutiable goods are confiscated.

VENEZUELA.

[From reports by Consul Thomas W. Voetter, La Guaira, and Chargé d'Affaires Jefferson Caffery, Caracas.]

Tariff Classifications.

The following articles, not specially mentioned in the customs tariff of Venezuela, have been classified by the customs authorities, and are subject to the rates of duty set forth below:

Metal collar buttons and cuff buttons, even containing ivory, bone, celluloid, and similar material, without gold or silver, class 6, tariff No. 474, dutiable at 2.50 bolivars per kilo (about 22 cents per pound); to be declared as "prendas falsas" (imitation jewelry).

Elastic cords and braids of linen, cotton, or wool, class 7, tariff No. 493, dutiable at 5 bolivars per kilo (about 44 cents per pound).

Wooden tobacco pipes, even with mouthpiece of rubber or celluloid, class 4, 1.25 bolivars per kilo (about 11 cents per pound).

Melted hog's lard, class 3, with surtax of 50 per cent of the duty, 0.375 bolivar per kilo (3.28 cents per pound); to be declared as "manteca de cerdo fundida."

Cork sawdust with glue, class 2, dutiable at 0.10 bolivar per kilo (0.87 cent per pound); to be declared as "aserrín de corcho con cola."

Automobiles and accessories, class 1, dutiable at 0.05 bolivar per kilo (0.438 cent per pound); the accessories mentioned shall be dutiable at this rate only upon their importation with the particular automobile on which they are to be used, all on the same consular invoice.

Ground rice in grains and ground rice in chips, class 3, dutiable at 0.25 bolivar per kilo (2.189 cents per pound); to be declared as "arroz molido en forma de granos," and "arroz molido en forma de birutas."

Cassimeres containing threads of silk in the warp, class 7, tariff No. 504, 10 bolivars per kilo, plus 10 per cent ad valorem (87.5 cents per pound, plus 10 per cent ad valorem); this rate is the same as the rate on cassimeres of pure or mixed wool.

Cotton embroidered or open-work fabrics, weighing more than 130 grams (4.589 ounces) per square meter (meter=39.37 inches), class 5, tariff No. 355, dutiable at 1.25 bolivars per kilo (about 11 cents per pound).

Labels or trade-marks to be used inside of hats, class 4, dutiable at 0.75 bolivar per kilo (6.6 cents per pound); to be declared as "etiquetas ó marcas de fábrica que se usan en el interior de los sombreros."

The rates as converted above are the rates specified in the tariff of Venezuela. The duties actually to be paid amount to 1.565 times the figures given above, since there are surtaxes of 56.5 per cent of the rates specified in the tariff.

Rural mail delivery in Canada is to be greatly perfected, about \$200,000 being placed in the supplementary estimates therefor at Ottawa.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8487. Lumber for orange and lemon boxes.**—An American consular officer reports that most of the lumber used for boxes for shipping oranges and lemons, amounting to about 2,000,000 boxes annually, is imported into his district from European countries. After studying the situation carefully, he has suggested to a prominent merchant to place a trial order in the United States for an amount sufficient to supply the demand of the coming season, and in accordance with this suggestion he has made a request for American manufacturers to send estimates for supplies which will be needed. Copy of the complete report, giving dimensions of the woods needed, method of shipping, how prices should be quoted, and persons to be addressed, will be sent to interested firms by the Bureau of Manufactures.
- No. 8488. Cargo boats.**—An American minister reports that a European Government has authorized a credit of \$579,000 for the purchase of two additional cargo boats for use on its existing lines. An American consular officer, who is at present on leave of absence in the United States, is of the opinion that the orders for these boats will go to a certain European firm. He adds, however, that there will probably be an opportunity for American firms to secure orders for chain, cable, and various other supplies needed for the equipment of these vessels. Any American firms interested in this proposition would do well to get in touch with this officer while he is in the United States.
- No. 8489. Hydraulic irrigation machinery and agricultural implements.**—A resident of a Latin-American country has recently secured a concession from the Federal Government to erect hydraulic irrigation works for irrigating his vast properties. An American consular officer suggests that American manufacturers of such machinery as will be needed, as well as all kinds of agricultural machinery, should correspond direct with this person in Spanish. Catalogues and other descriptive matter should be sent at once.
- No. 8490. Supplies for new naval academy.**—An official in a South American country has informed an American consular officer that he would be glad to receive catalogues, preferably in Spanish, of the following articles for use in the naval academy in the country in which he is located: Beds (150 will be needed), tables and chairs, table linen, and cutlery. He also wishes to receive bids on a complete modern gymnasium outfit, with rowing machines having sliding seats. All communications should be sent direct to this person.
- No. 8491. Electric-power plant.**—By communicating direct with a resident of a Mexican city, an American consular officer reports that firms in the United States may be able to find a sale for electrical power machinery. This person is planning the erection of a hydraulic water plant for the purpose of generating electric power, as well as for electric lighting.
- No. 8492. Electrical machinery and waterworks supplies.**—A British publication recently announced that the Local Government Board would hold an inquiry at Nuneaton (near Birmingham) into an application for permission to borrow \$36,500 for providing new plant and buildings in connection with an electrical undertaking. There is time for any electrical apparatus manufacturer in the United States to write to Nuneaton to secure information regarding this plant. The water committee of Nuneaton is recommending a scheme costing \$73,000 for further extension of headings, laying of pipe, equipment of pumping station, etc.
- No. 8493. Telephone switchboard and accessories.**—The Post and Telegraph Department, Brussels, Belgium, has called for tenders for the installation of a telephone switchboard and accessories. Specification No. 1108 may be obtained from the Bureau des Renseignements, 15 Rue des Augustins, Brussels, Belgium.
- No. 8494. Railway.**—Tenders are invited by the municipality of Reguengos, Portugal, for the construction of the first section of the Guadiana Railway. The estimated value of the contract is placed at \$486,650, and tenders will be received through local agents only.

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WINE PRODUCTION ABROAD.

NEW ZEALAND.

[From Vice Consul General Henry D. Baker, on special detail.]

About 1,000 acres in New Zealand are now under grape culture for wine. The vineyard acreage would probably be much larger except for uncertainty over the policy of continuing or prohibiting the sale of alcoholic beverages. The New Zealand Viticultural Association recently represented to Parliament that the grape-growing and wine-making industry of the Dominion has been greatly discouraged by the present licensing act, and has requested that the law be amended by exempting New Zealand wines from its operation.

Under this act each of the 68 licensing districts of New Zealand must vote every three years on local licensing, and also national prohibition or continuance must be decided by a general vote throughout the Dominion. The chief justice of New Zealand, in a recent suit, gave his opinion that in no-license districts wines could not only not be sold, but could not be made. At the general elections in New Zealand, on December 7, 1911, no districts made changes, and although 108,036 votes were cast for national prohibition and 91,497 against, yet national prohibition was defeated, as the percentage in favor of it was 54.15, whereas the percentage required to carry the issue was 60. Had national prohibition carried, it would have suppressed the present wine industry, except possibly for the export of wines, and the trade in imported wines would have had to stop also.

What Wines Can Be Produced.

New Zealand grapes, which grow chiefly in the northern part of the North Island, produce good wine of the claret and moselle type. The commissioners of the late Franco-British Exhibition spoke with especial favor of the brands sent from Auckland. An acre of grapes in the northern part of New Zealand can easily be made to yield 500 to 700 gallons of wine per year. New Zealand can not compete with hotter countries in producing full-bodied wine of high alcoholic per-

centage, and the local grapes do not have sufficient saccharine matter for ports, burgundies, or sherries without artificial assistance, but for light popular wines, such as clarets and moselles, climate and soil seem well suited.

About seven years ago the New Zealand Agricultural Department established a viticultural experiment station in the North Island to demonstrate to intending vine growers the most suitable varieties of resistant American stocks on which to graft the best wine and dessert grapes, with information on the art of wine making. No fresh capital, however, has for several years been invested in the industry. The recent annual report of the New Zealand Department of Agriculture mentioned that no appreciable increase of vineyard area had taken place, but rather the reverse, for which the risk of no license being carried was accountable.

Imports—Market for California Wines.

Owing to the uncertainties of the local wine trade domestic output is not likely to gain; consequently imported wines will probably continue to meet most of the New Zealand demand so long as their sale is permitted. The imported wines come mostly from Australia, United Kingdom, and South Africa, Australia supplying 65,139 gallons, United Kingdom 44,546 gallons, South Africa 23,320 gallons, and British Columbia 1,959 gallons. Only 1,268 gallons were supplied by the United States.

Australian wine containing not more than 40 per cent proof spirit pays in duty 5s. (\$1.22) per gallon; wine other than sparkling and Australian, containing not more than 40 per cent proof spirit, pays 6s. (\$1.46) per gallon; sparkling wine containing not more than 40 per cent proof spirit pays 9s. (\$2.19) per gallon; and wine of any kind containing more than 40 per cent proof spirit pays 16s. (\$3.89) per gallon. With South Africa there is a reciprocity treaty which has given a great impetus to the sale of South African wine in this Dominion. South African wines other than sparkling pay only 2s. (40 cents) per gallon duty, and sparkling wines 5s. (\$1.22) per gallon. During 1910 excise duty was paid on 153,435 gallons of wine for home consumption in New Zealand, which represented a per capita consumption of 0.147 gallon.

It would seem as if there ought to be a larger trade in Californian wines, now that San Francisco has direct steamship service with Wellington, the capital of New Zealand.

ALGERIA.

[From Consular Agent H. Elford, Oran.]

The wines all along the coast of the Algerian Province of Oran, when properly made, are of good quality and greatly sought after from a commercial point of view.

The wines produced from vines grown in the plains in the vicinity of Oran (red soil, clay, and flint) are of average color and sometimes have a sharp taste. Those from the hills (clay and chalk soil) are finer in quality, stronger, and more steady. To the west of Oran the vineyards on the coast, and particularly those of Bou-Sfer, give wine of quite a superior quality.

At St. Cloud (east of Oran) grape gathering commences earlier than elsewhere and the wine shipped to France before others is used to

freshen up the French wines of previous years, rendering them again fit for commercial purposes. The St. Cloud wines are strong and have a rich color, but are sometimes a little sweet. At Perragaux the vines produce a large quantity of wine, but the quality is below the average and the greater part of it is distilled.

Improved Methods—Inland Grape Centers.

The same characteristics which are more or less common to all the wines of the Oran region are also to be found in those of Mostaganem. They are, as a rule, a little weaker; their color is not so dark; generally they are of a more delicate flavor, and they have a decided taste of the fruit.

In these different regions of the Oran coast the wines are made from excellent grapes of perfect ripeness, yet they have always sold 2 or 3 francs less per hectoliter (franc = 19.3 cents; hectoliter = 26.417 gallons) than those of the Sahel, which are similar. This inferiority is due solely to the unfavorable conditions under which the Oran wine is made; but wine growers are taking more care, and there is already a noticeable improvement.

The vineyards of the inland regions, Mascara, Tlemcen, and Sidi-Bel-Abbes, produce wines which are of decidedly finer quality; they also possess a stronger, more decided taste of the fruit, and are brighter in color. Their superiority is due principally to the altitude. In these high regions grape gathering does not commence until the end of September or October. Fermentation being effected under more favorable conditions, the wines are of a better quality.

The wines produced in the region of Tlemcen are of great delicacy, rich in color, and of remarkable freshness. They keep well. The most important places of production are Tlemcen, Mansourah, and Ain-Fezza.

Vigorous Plants—Intermediate Zone.

In the region of Sidi-Bel-Abbes the vineyards are half in the plains, half on the hills. Some are exposed to the spring frost which at times destroys all the young shoots; but such is the vigor of the vines that the second shoots bear almost as much fruit as the first ones would have borne. The Sidi-Bel-Abbes wines are good, fresh, and of a rich color, which they retain fairly well. Those from the hills are the best.

Apart from the vineyards surrounding the town of Sidi-Bel-Abbes the most important places in that region are Sidi-Lhassen, Oued-Imbort, Sidi-Ibrahim, and Ain-Trid.

The Mascara vineyards are old, but they give the best wines in the Province, very strong, of excellent quality, mellow in taste, and of a rich velvety color. The white wines on the hills (clay and chalk soil) are produced mostly by native plants that give remarkably good wine, 14° to 15° in alcohol, and considered among the best in Algeria. The wines of Saida, with less color, vie with those of Mascara, but the superiority is rather on the side of the latter.

Between the wines of the coast and those of the inland region are those of an intermediate section, of which the town of Ain-Temouchent is the center. The vineyards there, owing to the fertile volcanic soil, the situation, and the altitude, can be compared to those of Sidi-Bel-Abbes and Mascara. The wines contain a high degree of alcohol and are of bright color. They have the same defects as the wines of the coast but to a smaller extent; they are not so acid, for instance, and have

no racy taste. The best places for their production are Hammam-Bou-Hadjar, Les Trois-Marabouts, Sidi-Daho, and Chabat El Laham.

Production by Districts.

The following table will give an idea of the importance of the production in 1910:

Districts.	Acreage.	Gallons.
Oran.....	76,000	38,482,370
Bel-Abbes.....	36,730	13,849,555
Mascara.....	11,880	3,072,800
Tlemcen.....	8,600	3,080,496
Total.....	123,300	58,485,180

In general the vineyards of the Department of Oran are in excellent condition, although the phylloxera has caused much damage in some sections.

[In the July 30, 1910, issue of Daily Consular and Trade Reports there appeared an article on Algeria's wine industry.]

FRANCE.

[From Consul Wm. Bardel, Rheims.]

An official report of the total production of wine in France, including that of Corsica, Tunis, and Algiers, gives the amount of wine made during the year 1911 as 1,427,196,309 gallons, valued at \$304,663,715. A comparative statement of the production of wine from 1899 to 1911, inclusive, shows the following figures:

Years.	Production in gallons.	Value.	Years.	Production in gallons.	Value.
1899.....	1,265,567,183	\$265,064,042	1906.....	1,568,133,514	\$207,962,252
1900.....	1,933,614,505	263,627,700	1907.....	1,987,181,234	243,912,327
1901.....	1,684,889,738	200,559,104	1908.....	1,821,187,293	210,926,645
1902.....	1,155,885,021	181,072,277	1909.....	1,669,373,021	221,636,495
1903.....	1,102,406,170	214,000,853	1910.....	983,680,529	278,104,985
1904.....	1,964,689,113	263,303,136	1911.....	1,427,196,309	304,663,715
1905.....	1,713,888,244	193,106,998			

According to these figures, the production of wine in the year 1911 is valued higher than that of any of the other 12 years here quoted. While the average price per gallon for the wine produced in the year 1911 was 21.4 cents, that of champagne, which, among the above-reported figures appears as amounting to 3,642,085 gallons, valued at \$10,813,139, cost \$2.97 a gallon—a price higher than ever before paid for champagne wine.

[For the French wine production of 1911 by Departments, see Daily Consular and Trade Reports dated Jan. 13, 1912.]

ITALY.

[From Consul General James A. Smith, Genoa.]

According to a report of the Bureau of Agricultural Statistics, the total area in Italy under wine-grape cultivation is 4,477,000 hectares (11,062,868 acres).

The vintage of 1910 was a partial failure. In 1911 better results were obtained, the total production of grapes reaching 6,514,000

metric tons (metric ton=2,204.6 pounds). From this amount 2½ per cent should be deducted for grapes not used in wine making, leaving a net total of about 6,350,000 metric tons. On an average basis of 66.6 liters (17.594 gallons) of wine for each 100 kilos (220.46 pounds) of grapes, the total production of wine in 1911 was 42,300,000 hectoliters, or 1,117,441,100 gallons. The approximate yield in 1910 was 773,834,585 gallons, and in 1909 1,591,627,052 gallons.

The production of grapes by Departments was as follows:

Departments.	1909	1910	1911	Departments.	1909	1910	1911
	<i>Met. tons.</i>	<i>Met. tons.</i>	<i>Met. tons.</i>		<i>Met. tons.</i>	<i>Met. tons.</i>	<i>Met. tons.</i>
Piedmont.....	1,200,800	726,300	760,300	Abruzzi and Molise.....	456,209	121,400	262,000
Liguria.....	142,400	81,400	92,400	Campania.....	1,020,500	258,600	464,700
Lombardy.....	420,800	262,700	318,400	Apulia.....	1,200,200	516,800	782,100
Venetia.....	542,500	343,300	514,000	Basilicata.....	97,600	38,300	65,100
Emilia.....	936,800	653,900	928,200	Calabria.....	181,430	93,200	140,700
Tuscany.....	797,300	422,300	624,800	Sicily.....	893,050	641,440	685,200
Marches.....	605,600	179,500	335,900	Sardinia.....	200,300	91,200	113,400
Umbria.....	359,500	81,000	161,300				
Latum.....	557,800	162,500	285,500	Total.....	9,612,780	4,673,540	6,514,000

[Other references to Italy's wine crop appeared in Daily Consular and Trade Reports on Sept. 8, Nov. 15, and Dec. 15, 1911.]

COMMERCIAL TRAVELERS IN SWITZERLAND.

[From Consul George Gifford, Basel.]

For the first time in a quarter of a century an American commercial traveler, or at least a traveler for an American house, last year called at the Basel consulate. He was offering articles which one would least expect to sell here in competition with domestic manufactures. He reported that he had done very well in Germany and merely wanted information about the Federal license he must have with a view to the conquest of Switzerland also. From a letter afterwards received it appeared that in Switzerland, too, he had done very well.

Of the 35,382 commercial travelers licensed in Switzerland in 1911, 28,520 were Swiss. The 6,862 remaining were distributed as follows: Germany, 4,791; France, 1,313; Italy, 330; Austria-Hungary, 206; Belgium, 93; England, 75; Netherlands, 36; Spain, 11; Luxemburg, 2; United States, 1; Denmark, 1; Sweden, 1; Norway, 1; Russia, 1. In 1910 three licenses were granted to Americans and in 1909 only one.

Lines Handled—License Fee.

It is interesting to note the different branches in which the foreign travelers, more than two-thirds of them Germans, were engaged in 1911: Textiles, 1,988; machinery, 194; metals, 655; jewelry, watches, clocks, and watch materials, 326; fancy goods, 220; food products and tobacco, 643; leather and manufactures, 390; glassware, 103; objects pertaining to literature and art, 642; manufactures of cement, clay, and stone, 156; chemicals and drugs, dyes, 341; wood and woodwork, 265; oils and grease, 91; waste and manures, 10; rubber goods, 110; articles of straw, rattan, and bark, 41; agencies, 58; various articles, 629.

It may be repeated here that a traveler simply taking orders from commercial houses pays no fee for his license, but if he visits private houses, the charge is \$30 a year.

RUBBER INDUSTRY OF THE UPPER ORINOCO.

[From Consular Agent William D. Henderson, Ciudad Bolivar, Venezuela.]

Above the rapids of Atmes, at which point river steamboat navigation stops, Hevea rubber trees are first met on the Orinoco River on Raton Island, above Maipures. From the mouth of the Vichada River to San Fernando de Atabapo, the capital of the Amazonas territory of Venezuela, there is only a small number of Hevea trees, and these are on the banks of the Orinoco. The output of this section is about 300 quintals [probably the Spanish quintal of 101.4 pounds] of fine rubber and sernamby per season. San Fernando de Atabapo, located at the junction of the Atabapo and Orinoco Rivers, and diagonally opposite the mouth of the Guaviare River, is the chief trading town of that section, and there the rubber gatherers come at the end of the season to ship their rubber to Ciudad Bolivar. There are numerous shops there, and much business is done during April and May. In the last few years the rubber crop has reached 3,500 to 4,000 quintals of rubber and sernamby, but there have been years in which the crop amounted to 500 quintals more.

From San Fernando de Atabapo up the Orinoco River to a point called Barbilla permits for exploiting rubber are granted, but only along the river. According to trustworthy information there are no Hevea trees in this region except as far as the floods reach on the banks of the Orinoco. There are quantities of other rubber trees, but these are not worked. The caucho and sernamby extracted along the river above San Fernando de Atabapo are calculated at 1,000 quintals a year. In the past few years rubber trees which yield about 100 quintals a year have been discovered along the Ventuari River.

The Casiquiare River region is the chief rubber-producing area. From the junction of that river with the Orinoco to the Rio Negro the rubber trees are more plentiful and the population larger. It is estimated that the total production of rubber on the Casiquiare River and its tributary, the Siapa, amounts to 3,000 quintals in an average season.

The extraction of rubber generally starts in September, the date depending on the state of the river floods, and lasts until March or April. Each workman is given an "estrada" or division, comprising 300 to 500 trees, which he cleans, preparatory to tapping. Each tree yields on an average 1 ounce of sap at a tapping. About half of this is lost in preparation, and there is a further loss of one-third after it is cured and made up into balls. The workmen, most of whom are Indians, are paid for the rubber they extract in proportion to the price at Ciudad Bolivar, and provide themselves with food. The women help in tapping and smoking the rubber. [An article on the Orinoco rubber forests appeared in the Daily Consular and Trade Reports for Sept. 22, 1909.]

Consular Trade Conferences.

Consul Henry C. A. Damm, of Cornwall, Ontario, Canada, reports that he will leave his post on April 1, 1912, to spend 21 days leave of absence in the United States. He may be addressed at 656 Madison Street, St. Charles, Mo.

URUGUAYAN RAILWAY DEVELOPMENT.

[From American Minister Nicolay A. Grevstad, Montevideo.]

Work has just been started on a connecting 35-mile line of the Midland Railway Co. from Tres Arboles to Piedra Sola, in the Department of Tacuarembó, the contract announcement of which appeared in Daily Consular and Trade Reports for January 12, 1912. The constructor is Engineer Juan Storm, a well-known railroad builder. He is working a force of 600 men and expects to have the new line ready for operation in about a year. The 91-mile line from Fray Bentos to Algorta, finished last year, was also built by Mr. Storm.

The new line, although comparatively short, is of great importance, especially to the river cities of Fray Bentos and Paysandu, as it will give each a fairly straight through line to the border city of Rivera, the northernmost point of the Department of Rivera. Paysandu, with upward of 20,000 inhabitants, is probably the greatest livestock center of Uruguay. Fray Bentos, the capital of the Department of Rio Negro, is a city of some 8,000 people. It has been made a port of entry, which will add greatly to its importance as a distributing point.

American exporters seeking a market in the interior of Uruguay should not overlook the two important cities of Fray Bentos and Paysandu, on the Uruguay River. When the new connecting line is finished a large section of Uruguay can be reached easier and more cheaply from Fray Bentos or Paysandu than from any other distributing point in the country.

PROPOSED JAMAICAN-CANADIAN LINE.

[From Consul Nicholas R. Snyder, Kingston, Jamaica.]

Attempts have been made to interest the Government and the merchants of Jamaica in the establishment of a steamship line between this island and Canadian ports, but so far these efforts have not been successful. The vessels of the various American companies plying between British West Indian ports and the United States are said to be able to handle the freight of Jamaica from and to Canada quite satisfactorily. The United States is the best market for the products of Jamaica and the chief center for purchasing supplies.

The Extensive German Forests.

Consul General A. M. Thackara, of Berlin, states that Germany's area of forest lands is about 34,500,000 acres, or about 27 per cent of the whole area of the country. About 11,000,000 acres of forest lands belong to the various State governments of Germany, 5,500,000 acres are public forests; over 600,000 acres belong to Kings and Princes of various States, while 16,000,000 acres are privately owned.

Russian fertilizer factory.—A factory is to be erected at Baku, Russia, to work fish waste for manures. The enormous quantities of fish obtained in the Caspian Sea lead the promoters to hope that the new venture will enable Russia to supply its home demand for fertilizers.

MOTOR CYCLES IN THE TRANSVAAL.

[From Consul Edwin N. Gumsalus, Johannesburg, South Africa.]

It is estimated that there are over 1,000 motor cycles in Johannesburg and probably 500 more along the Reef, which is known as the Witwatersrand mining district. During 1911, 801 motor cycles were registered in this city, not including those registered in other municipalities along the Reef. From January 1 to February 8, 1912, 590 motor cycles were registered in Johannesburg. The figures for the other towns are not available. There are probably over 1,000 gasoline automobiles in use in Johannesburg, but only one electric.

The streets in Johannesburg and the larger towns of this consular district are well paved. The country roads, on the whole, are not considered good, though they will compare favorably with the average country districts of the United States. The license fee for any motor cycle in Johannesburg is \$2.50 a year. The retail price of petrol varies from \$4.38 to \$5.59 per 10-gallon case, according to quality.

The average prices for the better grades of motor cycles, with free engines, are \$353 to \$365. The standard model, with fixed engine, sells for \$304 to \$316. Other makes, of cheaper grade and construction, range in price from \$255 to \$304 for free-engine models, a slight reduction being made for standard models in this class. The side car, consisting of a third wheel and seat to be attached to motor cycles, is becoming popular here, the additional cost varying from \$48.66 to \$146, according to frame and fittings. Motor cycles for ladies, open-frame model, are being introduced into Johannesburg, the price being the same as for the ordinary motor cycle.

The names of the motor cycles most in use here, in order of numbers and prominence, are as follows: Triumph, Bradbury, Matchless, Humber, Rover, Bat, B. S. A., Precision, New Hudson, Zenith-Gradua, Rudge-Whitworth, Ivy, and Scott, all of British manufacture. A German motor cycle, the N. S. U., has been sold here to some extent, in the past, but is not at present represented here. The Indian, an American make, is now being introduced here and is meeting with fair success. Other motor cycles on this market include the Singer, Rex, Royal Enfield, the James, Forward, New Comet, Abington, King Dick, and Douglas, of English make, and the F. M., of Belgian manufacture.

Engines of motor cycles for sale here should have a clearance of at least 5 inches, owing to the numerous stones encountered on outside roads. The tires universally used here are 2½-inch. The customs duty on motor cycles is 15 per cent ad valorem, with 3 per cent preference in favor of the British product. [A list of motor-cycle dealers in Johannesburg may be obtained from the Bureau of Manufactures.]

Canadian National Exhibition.—In forwarding the names of the officers of the Canadian National Exhibition held annually in Toronto the latter part of August or the first of September, Consul R. S. Chilton, jr., adds: "This exhibition is probably the largest of its kind on the continent and affords an excellent opportunity for the display of American goods as well as for the study of Canadian progress and requirements." The names referred to are obtainable from the Bureau of Manufactures.

MAINTENANCE OF BRANCH HOUSES IN HONGKONG.

[From Consul General George E. Anderson.]

The cost of opening a Hongkong branch of an American manufacturing or exporting concern depends, of course, upon the nature of the undertaking. Three general elements are to be considered in the matter—the foreign manager and assistants, if any; the Chinese staff, and expense for rent and office maintenance.

Probably a reasonable start in business could be made upon the following monthly basis, figuring the gold equivalent of the Hongkong currency at 43 cents to the dollar:

Monthly expenses.	Hong-kong currency.	United States gold.	Monthly expenses.	Hong-kong currency.	United States gold.
Foreign manager.....	\$800	\$258.00	Broker.....	\$50	\$21.50
Rent of premises, telephone, etc.....	200	86.00	Boy and coolie.....	25	10.75
Stenographer and bookkeeper.....	125	53.75	Miscellaneous.....	20	8.60
Shroff.....	25	10.75	Total.....	1,045	449.35

In most lines of business in Chinese ports the entire trade of the establishment hinges upon the native staff, which is represented in the first place by the comprador. The comprador is the Chinese middleman, through whom the foreign firm deals with Chinese customers or through whom purchases from Chinese producers are made. In addition to the comprador, one or more "shroffs," or Chinese cashiers and bookkeepers, must be had. The actual business of buying or selling is generally done through a "broker," who is, in fact, a salesman or a buyer in the Western sense, the Cantonese word for "buyer" and "salesman" being the same.

The first "extra" or addition to the establishment outlined above would have to be an assistant manager drawing a salary of about \$2,000 gold per year. Allowance, too, must be made for reasonable leaves of absence, for continuous service in the Tropics or in most parts of the Far East is impossible.

Few concerns sending men into this field handle a single line of goods. Most of them are general import and export commission houses, and the great mass of the business of the Far East is done through such houses.

[Consul General Anderson's complete report on the maintenance of branch houses in Hongkong, from which the foregoing extracts have been taken, will be loaned, upon request, by the Bureau of Manufactures.]

PAPRIKA PEPPER PRICES IN SPAIN.

[From Consul Robert Frazer, Jr., Valencia.]

With reference to the paprika or pimiento trade described in Daily Consular and Trade Reports for April 2, it may be stated that the average prices paid here for peppers by canners are 20 to 30 cents per arroba of 27½ pounds delivered at the factory. The canning process is carried out exclusively by girls and women earning 14 to 27 cents a day of about 11 hours, and the product is sold f. o. b. this port in the neighborhood of \$3.10 per case of 50 half-kilo (1.1-pound) tins and \$3.60 per case of 100 quarter-kilo tins.

SANITARY MEASURES IN RICE CULTURE.

[From Consul Frank Deedmeyer, Leghorn, Italy.]

Rice cultivation in the Province of Lucca, Italy, is subject to certain rules, promulgated by royal decree and supplemented by provincial regulations, which have for their object, primarily, the safeguarding of the health of the public and of those engaged in this industry.

No rice plantation can be established nearer than 1.24 miles to any city or town of more than 10,000 inhabitants, within 984 feet of one having less than 10,000 inhabitants, 656 feet of any burial ground, or 164 feet of any isolated dwelling. The waters used to flood rice fields must not be derived from basins, pools, or ponds; must not contain impurities; and must be kept moving constantly. Weeds and roots are to be carried off the fields daily or covered with earth to a depth of not less than 2 feet.

No person is allowed to lay out a new rice plantation without first giving notice to the mayor of the nearest community, furnishing a written description of the territory, its area, and a topographical map thereof. The public authorities, after a report from the provincial health officer, pass on each application. As a rule permission is granted only if the proposed site is unfit for dry cultivation.

Rest Periods—Official Inspection.

Persons working in the rice fields must be allowed one hour of rest after each of the two principal meals of the day, and no person can work longer at any time than three and one-half hours, while harvesters must have three hours of rest in two working days. Those engaged in thrashing must be given one hour of rest in every six hours of work. Posted notices about the field must state these legal rest periods.

Each community to which laborers from the outside resort in the harvesting and shelling of rice is furnished medical aid and drugs at public expense. The quarters, especially the sleeping rooms, are inspected regularly by the health officer, who also prescribes the character and the minimum quantity of food to be supplied. This cost is assessed upon the cultivators of rice in the respective communities. The law, through a system of deposits to be made in the local savings banks by the owners or managers of these plantations, secures the wages of the laborers.

SALE OF ENGLISH SHIRE STALLIONS.

[From Consul Homer M. Byington, Bristol, England.]

At a meeting of the Shire Horse Society, at Islington, March 7, 1912, the following resolution was adopted:

Haying in view the large and valuable market for draft horses existing in the United States and northwest Canada, which at present is almost exclusively supplied by Percherons, Belgians, and Clydesdales, it is desirable that a subcommittee be appointed by the council to devise a scheme whereby the suitability of Shire horses to the requirements of this market may be made known in those countries by advertising and otherwise, and that all other advisable means be adopted to obtain a share of this large and lucrative trade.

At the horse show held at Islington March 4 to 9, 3-year-old Shire stallions sold at auction from \$306 to \$3,168.

EDUCATIONAL GROWTH OF A CANADIAN PROVINCE.

[From Consul General David F. Wilber, Vancouver, British Columbia.]

The fortieth annual report of the public schools of British Columbia shows the total enrollment for the year ended June, 1911, to have been 45,125 in all schools and colleges under provincial jurisdiction, an increase of 5,303, or more than 10 per cent, over the previous year. The number of boy pupils is given as 23,277 and of girls 21,848.

The grand total of attendance by all pupils enrolled was 6,024,268 days, an increase of 521,831. The average actual daily attendance was 32,165, an advance of 4,069. The percentage of regular attendance was 71.27, the highest in the history of the public schools of this Province.

The total number of teachers was 1,179, a gain of 142. Of this number, 16 were employed in the colleges, 71 in the high schools, 499 in the city graded schools, 263 in the rural municipality schools, and 330 in the rural and assisted schools.

The cost to the Province of education proper was \$715,734, and of new schools, etc., \$286,074. The amount contributed by the people in incorporated municipalities and school districts was \$1,639,714, making a grand total cost of education for the Province under all heads of \$2,641,522, or \$724,386 more than in 1910.

Many New Buildings.

A number of new buildings will be necessary to provide sufficient accommodation for the rapidly increasing school population. A \$50,000 school is to be built at Nelson, British Columbia. The provincial Government grants \$36,000 to Kamloops toward a \$50,000 structure, \$50,000 to Penticton, \$17,500 and a portion of the cost for manual-training equipment to Cranbrook, and various amounts to other cities for school buildings. South Vancouver will spend \$135,000 in extending its present buildings and \$185,000 in new buildings. New Westminster and Chilliwack plan complete and up-to-date high-school buildings. At Kerrisdale \$68,000 will be spent for new schools, at Nanaimo \$50,000, and at North Vancouver \$40,000. Plans have been requested for the \$1,500,000 provincial University of British Columbia, for a competitive prize, by Dr. Young, the minister of education.

American firms desiring to supply the new equipment necessary for these buildings should lose no time. They are most likely to place their equipment by tendering through local firms. Attention should be given to the provisions of the British Columbia companies act, which imposes certain restrictions upon foreign corporations doing business in this Province.

As British Columbia is being settled rapidly, many new schools will be built, and firms whose goods are known to the authorities as serviceable and desirable should find a good market here.

Consul General John L. Griffiths, of London, reports further increases in British foreign trade in February. Imports aggregated \$290,626,027, or \$17,755,245 over February, 1911. Exports reached \$182,446,686, or \$8,940,778 higher.

CONSTRUCTION WORK ABROAD.**CANADA.**

[From Consul Robert S. Chilton, Toronto, Ontario.]

New Branch of Canadian Pacific Railway.

Recent press publications here give the details of a contract made by the Canadian Pacific Railway with Deeks & Hinds, of 48 Scott Street, Toronto, for the building of a branch leaving the present Toronto-Montreal line at Agincourt and rejoining it 20 miles west of Smiths Falls, a total distance of 198 miles. The value of the contract is said to be about \$10,000,000 and the work is to be completed in two years. A single track is to be laid, but the bed will be made wide enough to accommodate a double track when needed. The new line will follow the north shore of Lake Ontario, taking in nearly all the towns now served by the Grand Trunk and the recently inaugurated line of the Canadian Northern, which now runs from Toronto to Trenton and is to be extended to Ottawa. With the Toronto & Eastern electric line, which is to operate over the same territory, these three roads will give this region exceptional transportation facilities.

[From Consul Harry A. Conant, Windsor, Ontario.]

New Automobile Body Factory.

A factory for the manufacture of automobile bodies is to be established at Windsor by the new National Body Co. (Ltd.), which is being incorporated with a capital of \$100,000 by several Detroit and Canadian capitalists. A 3-acre site has been purchased and the company proposes to break ground some time in May, after the usual exemptions have been granted by the city council, for a 2-story brick factory, 300 by 55 feet. Plans are already being prepared for the building, which will cost about \$35,000.

[Additional notes from Consul General David F. Wilber, Vancouver.]

Harbor Works, Business Blocks, Schools, etc.

New docks.—It is stated that 75 per cent of the following sums will be spent by the following-named companies for docks and wharves in British Columbia: Vancouver Dry Dock & Shipbuilding Co., Vancouver, British Columbia, \$1,214,150; British Columbia Marine Railway Co. (Ltd.), Esquimalt, British Columbia, \$3,000,000; Grand Trunk Pacific Railway Co., Prince Rupert, British Columbia, \$2,000,000; Esquimalt Grading, Dock & Shipbuilding Co., \$2,637,800; Canadian Vickers-Maxim Co., Montreal, \$4,000,000; British Canadian Shipbuilding & Dock Co., Sydney, Nova Scotia, \$6,000,000.

Wharf.—The Canadian Pacific Railway Co. has let to O'Brien, McCaughey & Lemcke, Fairmont Hotel, Vancouver, the contract for its \$40,000 dock at New Westminster, British Columbia.

New hotels.—(1) The Dominion Construction Co., 35 Canada Life Building, Vancouver, has contracted with Dr. T. H. Wilson, 407 East Hastings Street, Vancouver, for a 6-story brick and wood, 75 by 122 foot store and hotel building, after plans drawn by Architect L. E. Gordon of this city, and is also getting ready for minor contracts. (2) J. C. M. Keith, of Victoria, British Columbia, is preparing plans for two frame hotel buildings at Kelowna, British Columbia.

New bank buildings.—(1) H. L. Stevens Contracting & Engineering Co., Pacific Building, Vancouver, will build for Molson's Bank a 6-story, 25 by 120 foot building for its east branch in Vancouver. The upper floors will be leased as offices. This bank's head office is at Montreal, Quebec, Canada. (2) The Bank of Canada will erect a new building at Nanaimo for which F. M. Rattenbury, architect, Victoria, British Columbia, drew the plans. (3) The Northern Crown Bank (head office, Win-

nipeg, Manitoba, Canada) has called for plans from architects Horton & Phipps, Victoria, British Columbia, for an 8-story brick and concrete building.

New office buildings.—(1) A \$520,000 office building will be erected by McConnell, Abbot & Drayton. The architects are Wallington & Wheatley, of Davis Chambers, Vancouver, British Columbia. (2) The Burrard Construction Co., 301 Pacific Building, Vancouver, will erect a \$30,000 store and office building for Thompson Bros., and is ready to arrange for minor contracts. Stuart & White, of the Metropolitan Building, Vancouver, are the architects. (3) A. J. Bird, Winch Building, Vancouver, is architect for a \$60,000 4-story building. (4) Parr, McKenzie & Day, 570 Granville Street, are architects, and B. Davidson, 1012 Broughton Street, Vancouver, is contractor for James Borland's 8-story brick store and office building. (5) Henry Birks & Sons (Ltd.) (head office, Montreal, Canada), of this city, are to erect a 10-story, absolutely fireproof building, the main floors of which will be occupied by their jewelry establishment.

Theaters.—(1) Allan B. Stroud, Carter Cotton Building, Vancouver, is architect for the \$40,000 vaudeville theater to be built at Nanaimo by James Young, of that city. (2) A. M. Kennedy, stated to be president of the Affiliated Theaters Co., and formerly with the American Film Co., of New York, N. Y., is reported to erect a \$75,000 moving-picture theater, to be among the best equipped in Vancouver.

New churches.—(1) The Methodist congregation of Lynn Valley, North Vancouver, plans to erect a small new church building. (2) Work has commenced on the \$20,000 South Hill Baptist Church; Rev. J. N. Redman, pastor. (3) An \$80,000 church building is being erected by Parfitt Bros., of Victoria, for the St. John's congregation at Victoria; W. Ridgeway Wilson, Pemberton Building, Victoria, architect. (4) A cathedral, called Christ Church, will be erected by the Anglican Church at Victoria. (5) Bresemann & Durfee, Holden Building, Vancouver, are the architects for the \$75,000 Congregational Church. (6) St. Andrew's Anglican congregation of Prince Rupert, British Columbia (Bishop Du Vernet), will build a \$26,000 church here. (7) Canon White, in charge of the Anglican Church at Nanaimo, is arranging for erecting a larger church building.

Residences.—(1) J. W. Fordham Johnson is erecting a \$15,000 residence at Shaughnessy Heights, this city. (2) Honeyman & Curtiss, 821 West Pender Street, Vancouver, are architects for W. F. Brougham's \$12,000 residence at Point Grey. (3) Hugh A. Hodgson, Carter Cotton Building, Vancouver, is architect, and McPherson & Sinclair, of this city, are contractors for Mr. Hunting's \$25,000 residence on Shaughnessy Heights. (4) C. W. Pothbury, of Vancouver, is the general contractor for Dr. Johnson's \$15,000 residence.

New apartments.—(1) Dr. Robert Telford, Vancouver, will erect a \$500,000 apartment building, faced with stone, brick, and terra cotta, this spring. (2) S. B. Bird, Loo Building, Vancouver, is architect for a \$70,000 apartment house for Kee Lee. (3) Parr, McKenzie & Day, 570 Granville Street, Vancouver, are architects for K. Tsuchida's 4-story brick store and apartment. (4) The Dominion Construction Co. (Ltd.), 35 Canada Life Building, Vancouver, will build T. F. Patterson's \$135,000, 99 by 131 foot, 8-story apartment; W. D. Van Sicken, 51 Canada Life Building, Vancouver, architect. (5) The same contractors and architect will erect a similar apartment, with 77 suites, 6 stories, 66 by 132 feet, for C. G. Muller, at 1127 Robson Street, which will cost \$125,000. (6) A building permit has been issued for a \$35,000 store and apartment building, of reinforced concrete and thoroughly fireproof, for Capt. H. Fybus.

Y. M. C. A.—A large Y. M. C. A. building is shortly to be erected in Vancouver. The architects are Shattuck & Hussey, of Chicago.

Schools.—Robert McLean & Co., this city, were awarded the contracts for the Florence Nightingale (\$56,300) and Cecil Rhodes (\$53,000) schools for the city of Vancouver.

Warehouse.—Thomas Hooper, Winch Building, Vancouver, is architect for McLean Bros.' \$60,000 reinforced concrete warehouse.

Jail.—A jail to accommodate 100 prisoners is to be built by the provincial government on South Vancouver Island. (Address Minister of Works, Victoria, British Columbia.)

Open-air stadium.—Plans have been completed for a \$300,000 open-air stadium and auditorium in Stanley Park, to be larger than the one at Tacoma, Wash., by Heath, Gove & Neuse, architects, Metropolitan Building, Vancouver, and it is expected that contracts will be called for shortly.

Concrete waterworks reservoir.—The Graff Construction Co. (515 Crary Building, Seattle, Wash.) has been awarded contract for a \$32,729 water-system supply reservoir for the city of Kamloops, British Columbia.

MEXICO.

[From Mexican Daily Herald.]

Contract Signed for New Railroad.

The contract for a railroad from Balsas to Zihuatanejo was signed by the Department of Communications on March 22 for the Government, and Henry Weics in representation of the Mexican Pacific Co. A Government subvention of \$6,000 gold per kilometer (0.62 mile) is granted, due to the importance of the line.

The new line will start from Balsas and will follow the left bank of the railroad to Zihuatanejo, on the Pacific Coast. The construction of a branch line also is under consideration, to start at a point called Las Palomas, in the State of Guerrero, and connecting with the hacienda Las Balsas at a point called El Organal.

The work of locating the line must begin within 30 days under the terms of the concession, the railway company being obligated to notify the Department of Communications 15 days in advance of commencing work.

During the first year, counting from the date of signing the contract, the company must complete 100 kilometers of track from Balsas and 50 kilometers from Zihuatanejo, the work to begin simultaneously at the two terminal points. In the period of 20 months, 50 kilometers of the road from Las Palomas to the connecting point must be finished.

The constructing company obligates itself to pay \$300 per month to the fund for the upkeep of the bureau of railway inspectors and to bind its contract has deposited in the National Bank \$52,000 in Government bonds.

New Gulf Coast Line.

The completion of a contract between the Department of Communications and the National Railways for a line from Vera Cruz to Tampico and thence to Matamoras has been officially announced. The concession calls for the construction of two lines, one commencing at San Francisco station on the Inter-oceanic Railway, 45 kilometers from Vera Cruz, following the Gulf coast north to Tamos, on the San Luis & Tampico Railway, 13 kilometers from Tampico. The second line is to commence at a point between Tampico and kilometer No. 54 of the line from Tampico to Monterey, and follow the coast north to Rosita on the line between Matamoras and Monterey, 9 kilometers from the latter city.

The company is also authorized to construct a branch from a convenient point between San Francisco and Tamos to connect with Honey station on the line from Pachuca to Zacualtipan, or with Beristain on the Hidalgo Railway, or with a convenient point on the line now operated by the National Lines in the district of Tulancingo. This branch is evidently for the purpose of direct communication between Mexico City and the line to be constructed from Vera Cruz to Matamoras, and its exact location must be approved by the Department of Communications before construction begins.

Mexicans are to be given the preference in employment, and the Spanish language must be used. Foreign experts may be employed with the consent of the department. The company binds itself to complete 100 kilometers within two years, and an additional 100 kilometers each subsequent year, the entire distance to be completed in 10 years. Either steam or electricity may be used as motive power. The Government agrees not to grant any subsidy for the construction or operation of a railroad during the next 10 years within 15 kilometers on either side of the new line.

PERU.

[From Consul General W. Henry Robertson, Callao, supplementing report in Daily Consular and Trade Reports for Sept. 29, 1911.]

Concession for Building the Ucayali Railway.

The Peruvian Senate, by a vote of 25 to 5, on February 27, adopted the modifications requested by the American concessionaires in the concession which has for several years been sought for the building of the so-called Ucayali Railway. As the modifications in question had already been passed in the Chamber of Deputies by a vote of 76 to 24, the measure now goes to President Leguia for his approval, which will undoubtedly be granted.

This concession covers one of two routes to the Ucayali River that were under consideration for connecting Lima with Iquitos and the Amazon Valley. The road is to be built from Goyllarisquisca, on the Cerro de Pasco Railway, via Huanuco, and should prove of great commercial value to this country, whatever may be the financial return upon its securities, by opening up the vast and rich territory in the eastern part of the Republic under direct communication between the Pacific and Atlantic Oceans through the water transportation of the Amazon. The road is estimated to cost \$10,000,000 gold, on which the Government of Peru guarantees 6 per cent under security of the income from the tobacco tax, and it is expected that actual construction work will be begun within the next four or five months.

When the concession has been finally approved by President Leguia this office hopes to transmit a more detailed report upon the venture.

ENGLAND.

[From Consul Albert Halstead, Birmingham.]

Road from Birmingham to Wolverhampton.

The municipal surveyors of Birmingham, Wolverhampton, and the intervening towns have decided to recommend the construction of a road 100 feet wide, with a carriageway of 35 feet, two gravel footpaths of 8 feet each, and a grass margin between the footpath and the carriageway on one side with a width of about 41 feet, to be utilized in the future for an electric traction line. The road is to have trees planted in three rows. The cost of the proposed road, which will be 9.353 miles long, is placed at £120,000 (\$583,980).

NOTES FROM FRENCH WEST INDIES.

[From Consul F. T. F. Dumont, Guadeloupe.]

Interest rates.—The customary interest rate on property mortgages, personal notes with two indorsees, personal property, and collateral is 6 per cent; on crops, 5 per cent.

Electric-light concession.—On account of a lack of capital, nothing has been done in the matter of the concession for the electric lighting of Basse Terre and Pointe à Pitre, mention of which was made in Daily Consular and Trade Reports on May 12, 1911.

Household lighting.—Very few houses or buildings in Guadeloupe have any light other than candles. Even kerosene is little used, the consumption being but one gallon per head per year. The import duties make it impossible for the people, who are poor, to use either kerosene or gasoline, the former retailing at 28 cents a gallon and the latter at 68 cents.

Marketing American securities.—The real purpose of Guadeloupe's only bank (Banque de la Guadeloupe) is to assist the agricultural interests of the colony. It does not purchase bonds. Further, there are no brokers in stocks or bonds. It is possible that securities of this nature could be placed through the notaries of the colony, a list of whom is obtainable from the Bureau of Manufactures. French notaries usually are in position to make or recommend investments to their clients.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

No. 8495. Two transports and a tugboat.—A dispatch has been received from an American minister inclosing a copy of a law, with translation, authorizing the purchase by a foreign Government of two transports and a tugboat at a total cost of \$723,800. The transports are to have a carrying capacity of 5,000 to 6,000 tons of coal. They are to be acquired by licitation and must be new boats.

No. 8496. Coal.—An American consular officer in a European country reports that a coal shortage will soon be felt in the country in which he is located, especially in shipping circles. This country imports about \$20,000,000 worth of coal annually, and a discussion of the situation with many prominent men has lead the consular officer to believe that it would be possible, under certain conditions, to import American coal. These persons would like to receive propositions regarding this matter from American coal exporters at the earliest possible moment. Copy of the complete report, giving further details, will be sent to interested firms by the Bureau of Manufactures.

No. 8497. Automobiles, athletic goods, technical goods, machinery, and novelties.—The Bureau of Manufactures is in receipt of a communication from a business man in Germany stating that he desires to form connections with American manufacturers of automobiles, athletic goods, technical articles, machinery, and technical or other novelties in this line. He is a member of a firm enjoying an excellent reputation in that country, being at present engaged in the leather-beltng trade.

No. 8498. Woolen cloth.—An American consul in the Near East reports that certain grades of woolen cloth manufactured in Europe find extensive sale in his district. He has forwarded samples of this cloth and furnished the dimensions in which it commonly arrives, as well as the terms, price quotations, and other particulars. He writes that if American manufacturers can cut these prices and will send samples and full specifications he will submit them to interested persons.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

No. 564. Panama Canal supplies.—Sealed proposals, in triplicate, will be received at the office of the general purchasing officer of the Isthmian Canal Commission, Washington, D. C., until May 21, 1912, for the purchase of the Porto Bello rock-crusher plant equipment, consisting of rock crushers, boilers, condenser, engines, and rock-conveying system, offered for sale by the Isthmian Canal Commission, which are no longer needed. (Circular No. 696.)

No. 565. Construction of post-office buildings.—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring, and interior lighting fixtures) of the following buildings: (1) Until May 2 for post office at Crowley, La. The building is to be of one story and mezzanine, and has a ground area of approximately 5,100 square feet; fireproof first floor; stone facing, and tile and copper roof. (2) Until May 4 for post office at Hillsboro, Tex. Building is to be approximately 4,350 square feet in ground area; one story and mezzanine, faced with stone and granite to first floor with brick above, terra-cotta trimming and tile roof; the first floor only is of fireproof construction. (3) Until May 7 for post office at Olympia, Wash. Building is to be approximately 5,500 square feet in ground area, two stories and attic; with granite facing to first floor, limestone or sandstone above, and tin roof; the first floor only is of fireproof construction. Drawings and specifications of these buildings may be obtained from the custodians of sites at the various points or of the Supervising Architect.

No. 566. Vacuum-cleaning system.—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until May 1, 1912, for the installation of a vacuum-cleaning system in the United States post office at Oklahoma City, Okla., in accordance with drawing and specification, copies of which may be had at the office of the superintendent, Oklahoma City, or of the Supervising Architect.

DAILY CONSULAR AND TRADE REPORTS

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15th Year

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No. 82

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AN ENGLISH INDUSTRIAL CENTER.

[By Consul Benjamin F. Chase, Leeds.]

Leeds has a more varied line of industries than almost any other city in England, and no one industry predominates. The following is a review of industrial conditions in the Leeds district during 1911 as appeared in a Yorkshire publication:

During 1911 trade in the Leeds district showed a distinct improvement over the previous year. Locomotive builders had some good Indian and colonial orders during the year, but they had to cut prices to a minimum in order to meet competition. Machine-tool makers were slack for the greater part of the year. Textile-machine makers were well employed, and a branch of local engineering that greatly improved during the year was the manufacture of traction engines and agricultural implements, in which a satisfactory export trade was done. Toward the end of the year steel manufacturers secured some heavy orders for fittings used in the construction of railway wagons, but, generally speaking, the steel trade was anything but busy. The continued expansion in the employment of reinforced concrete brought increased orders to local makers of constructional iron and steel work, but in this department foreign competition was especially keen, and in Leeds there were several cases of foreign steel being set into buildings because the price was lower than that quoted by Leeds makers. Those firms that have taken up work in connection with motor engineering have done well in these branches, and Leeds has supplied large quantities of springs, axles, propeller shafts, and other important components of automobiles to some of the biggest firms of builders in the country.

The census taken in Leeds last year proved a disappointment, as the increase in the population in the past 10 years was but 16,600, the total population being 445,568. There has been a large exodus to the United States and Canada, during the early months of 1911 the number leaving averaging 200 to 300 per week.

Number of Textile Mills, Spindles, and Looms in the District.

There are 156 mills, including both spinning and weaving in woolens and worsted, with 636,578 spindles and 16,451 looms, in the Leeds consular district. Of these, 33 mills are in the city of Leeds, with 114,213 spindles and 2,892 looms, and 123 mills, with 522,365 spindles and 13,559 looms, outside the city. Of the latter the greatest number are in Morley, a suburban town with 11 mills having 31,150 spindles and 830 looms, and Batley (founder of the shoddy industry) with 15 mills having 66,080 spindles and 2,318 looms.

There are also 54 woolen and worsted weaving mills which do no spinning in this district with 4,799 looms, of which 16 mills with 834 looms are within the city and 38 mills with 3,765 looms in the balance of the district, the greatest number in any one place being at Pudsey, 7 mills with 705 looms.

There are 17 flock manufacturers in the consular district, of which 3 are in Batley and 3 in Leeds; 87 mungo and shoddy manufacturers, 25 in Ossett, 13 in Batley, and 7 in Leeds; 22 yarn spinners with 74,646 spindles; 2 hosiery manufacturers; 10 rug and blanket makers; and 36 carpet manufacturers.

There are 5 cotton spinners and doublers with 143,000 spindles, and one cotton spinner with 24,000 spindles, using American cotton.

Conditions in the Textile Industry.

From all reports the trade in textile goods was exceptionally good during 1911. The output being in the cheaper grades of cloth, a big demand came from India and Japan, which kept the mills busy early in the year. Fancy worsted suitings and light covert coatings were in demand, and tweed manufacturers were also busy. The high price for raw materials and keen competition, however, cut down the profits. The better-made fabrics are in demand for the Continent and South America and the cheaper grades for Canada, Australia, and the home market. Ladies' costume cloth of varied colors, especially a reversible tweed for jackets, had a big trade up to the time of the coronation. There was also a demand for blue serges, although taking the year through gray was the best seller here and on the Continent.

In midsummer labor troubles caused a falling off in the demand for heavy cloth for overcoats, ladies' mantles, and rainproofed cloth, but later in the year the demand was good and orders from the colonies kept up well. The demand for tweeds and serges seems to be swinging now to nap cloths.

In the heavy woolen and shoddy district of Dewsbury and Batley business was unusually good. Trade with Japan before the new tariff went into force kept many mills running night and day. Much of the cloth made here enters into the ready-made clothing for South African and home demand, and the balance goes to Canada and Australia. There are no exports in this line to the United States. Large shipments of cheap grades of cloth were sent to India.

American Rags on the Market—Rug and Blanket Trade.

Large quantities of American rags are imported into this district, averaging about 100 bales or 35 tons a week and are used in increased quantities at the Leeds and Morley mills. Formerly these rags were sent to be sold by the auctioneers here, but during the past year many exporters came over and dealt directly with the manufacturer. Imports were low late in the year, owing to advance in ocean-freight rates. During most of the year the call for American rags was not as good as for Continental, and the market seemed overstocked with them, thus bringing down the prices. If American dealers would watch the market and not glut it and lose profits in storage charges, they could soon command the situation to a great extent.

Rug manufacturers had a busy year, a great proportion of the exports being for South Africa, and late in the year Canada became

a heavy buyer. Not to exceed \$1,000 worth were sent to the United States during the year.

Blankets were in fairly good demand until late in the year, when army supplies for Italy and Turkey caused a boom in that trade.

Trade in Ready-Made Clothing.

Ready-made clothing for men, women, and children is an important industry in Leeds, not only in large factories, but at the homes. Two or three small shipments of ready-made overcoats were made to the United States, but unless the duties are reduced the trade is not likely to be of much importance. The requirement of the trade boards act of a minimum wage and that the employee shall be paid for all time on the premises has had some effect on this trade. Formerly when work was slack the worker could engage in work for himself and remain on the premises.

The bulk of the trade in ready-made clothing is with South Africa, and it seems that if American manufacturers can meet the price they would find a better field for development in that country than in this market, except for the higher-grade clothing. The clothing manufacturers have a special-measure department, and many clothiers take measurements and send the order to the manufacturers, who make up the suits in their factories. This is a growing practice. The Leeds clothing factories produce all styles from the business to the full-dress suit.

Shipments of Textile Machinery.

There has been a decrease of about \$5,000,000 in the value of shipments of textile machinery from the district during the past five years. A local publication, in its review of the trade for 1911, mentions two new machines for the treatment of raw materials—one to remove foreign substances from fibrous matter and the other to reduce the length of fine wool in order that it may be readily handled in the machinery. [Samples of raw cloth, uncut, cut wool, yarn, and finished cloth produced on the latter machine, and copies of the claims will be loaned by the Bureau of Manufactures.] Regarding the one to remove foreign substances, the publication says:

This is entirely a mechanical process, the machine comprising a helically bladed device arranged to rotate in a perforated drum that itself rotates in a reverse direction. The helically bladed device consists of single-bladed sheet-metal stampings arranged alternately and in opposite directions upon a tube formed with two spiral grooves proceeding from opposite ends toward the center of the shaft so as to divide the comb into two reversely acting sets of strikers.

The shipments of worsted machinery invoiced through this consulate to the United States for 1911 amounted to \$45,517, against \$103,321 in 1910. Other textile machinery, including flax and jute spinning machinery, silk machinery, etc., in 1911 was \$48,810, and in 1910, \$58,828.

Leather and Shoe Trade.

The leather industry improved over 1910. The price of raw materials was higher and the margin of profits on shoes was alleged to be less than formerly. The Admiralty on the latest contracts required that the uppers for shoes should be made of chrome-tanned box calf, and did not specify that this should be of British manufacture. Heretofore the leather used has been vegetable tanned. The leather

to be used under the new contract is mostly of American or German production. Leeds furnished all of this leather heretofore, and one manufacturer estimates the loss as \$250,000 a year. The leather industry in the district is declining, but shoe manufacturing is increasing.

Leeds originally produced heavy shoes, but after finding the American make of lighter and more artistic appearance in greater demand that line was taken up. Low shoes for both men and women were in demand during the year. The American shoe stores here seem to be doing a good business, and when they once get a person to wear their shoes they have his trade. Some patent novelties of American make for supporting the instep are seen in shoe-store windows. White shoes and athletic goods were in demand during the summer season. The cheaper grade of American shoes for working people, selling for about \$2.75, should find a market in this district.

The Leeds technical school for shoe operatives began its fall term with 100 students. The instruction includes clicking, closing, machine and hand lasting, rough-stuff cutting, and finishing. New machinery has been added since the special report made on this institution [see Daily Consular and Trade Reports for Oct. 27, 1910].

Soap Industry—Acreage under Cultivation—Building Operations.

Owing to the strikes and the high prices of soap materials, conditions in the soap industry were not as good as in 1910. The American cottonseed oil hard soap is in demand for wool scouring.

There were 48,438 acres planted in wheat in the West Riding of Yorkshire during 1911, and the output averaged 32.87 bushels per acre against 30.34 for the preceding year. The acreage in oats was 78,653. The number of pigs raised in the district was 121,325 against 93,678 for 1910. The total area of land under cultivation last year was 14,648,104 acres, which shows a decrease of over 1,000,000 during the past 10 years. The agricultural machinery used in the district is imported mostly from the United States and Canada.

The development of the new coal area in Doncaster has brought a large number of people into that district and hundreds of houses have been built recently. The town hall of Leeds is to be remodeled and a teachers' training school and a telephone exchange building are to be constructed. It would be well for American manufacturers of builders' supplies to get in touch with the builders.

Iron and Steel Industries.

Leeds at one time occupied the leading position among English cities in the manufacture of iron and steel, but, owing to the improved means of transportation in other centers, conditions have changed. The rates from this city by rail to Liverpool and Hull are \$2.68 to \$2.92 per ton, and for this reason seaport cities have an advantage over Leeds.

Locomotive builders early in the year were busy with orders, chiefly from India and South America. Toward the end of 1911 orders for traction engines increased. Makers of other rolling stock had good orders from India and South Africa. The annual output of locomotives in Leeds is estimated at 300, ranging from the plantation engine of 4 tons to the locomotive of 130 tons for the colonies, India, and South America.

Trade in agricultural machinery was good early in the year, orders coming from India, South Africa, and European countries. One firm sent plowing engines to the United States, consisting of traction engines with drums and wire rope for hauling the plow across the field. Shipments of agricultural machinery were made to the Philippines, Porto Rico, and Hawaii.

Rolling mills were busy with work chiefly for ship and boiler plates. Large orders for war materials, torpedoes, and cartridges for the British Government were placed with one firm here.

Inquiries for machinery for use in mints came from Italy, the Netherlands, and Turkey. Mining and waterworks developments in South America, Australia, and China brought orders for pumping machinery. The demand for oil-mill machinery is not so great as when the soya bean first came into prominence. One firm in Leeds is making areoplanes and another a fine type of aero engines.

Output and Prices of Coal.

There are approximately 400 collieries in Yorkshire with 147,000 employees, and the average output is 32,000,000 tons per annum. Owing to uncertain labor conditions prices of coal increased during 1911. Germany and the Netherlands, which usually took about one-third of the coal exported through Hull and Grimsby, bought 400,000 tons less. Heavier shipments to Egypt, France, and South America, however, helped to make up the decrease. Increased freight rates following advances in wages to seamen and railway employees have injured the trade.

Prices of coal at the Yorkshire Coal Exchange for the first week of 1912 were:

South Yorkshire best hard, \$3.20 to \$3.30 per ton at Hull; best Derbyshire top hards, \$2.86 to \$2.92 per ton at Grimsby; West Yorkshire peanut, \$2.31; South Yorkshire peanut, \$2.43; South Yorkshire slack, \$1.95 to \$2.19 at Goole; West Yorkshire Hartley, \$2.68 at Goole; West Yorkshire ranch slack, \$1.83 at Goole; best Barnsley hards, \$2.49; Barnsley seconds, \$2.31 to \$2.37; best washed and screened steam nut, \$1.95.

Developing the Doncaster Coal Fields.

The development of the Doncaster coal fields is attracting people from all sections, not only miners but manufacturers and store-keepers. It is expected that Doncaster will become the metropolis of Yorkshire.

In sinking the shafts for coal in the new field methods novel to this region have been adopted. The older shafts were from 9 to 11 feet in diameter; those put down now range from 18 to 23 feet. The provisions to prevent collapse in sinking are described in a local publication as follows:

One method is by tubbing, which consists of rings of heavy cast-iron plates in segments jointed with stiff flanges and heavy bolts, the rings being caused to descend as the sinking proceeds. At another mine freezing is used. A number of tubes, 3 or 4 inches in diameter, are driven into the ground in a ring around the site to be excavated, and within these tubes are other smaller tubes in which a freezing mixture is kept constantly circulating. At another mine the German cementing process is adopted. In this process cement in a fluid form is pumped into the strata under great pressure and as it "sets" it forms a sort of solid concrete.

Extension of American Trade.

Data showing the imports of American goods into the district are not available. While some items, such as machinery, come direct, the larger part comes through importing houses at seaport towns.

In most lines a branch agency in Leeds would accomplish little, while a live agent stationed in one of the seaport towns, who would be in a position to make several calls in the interior towns during the year, could accomplish much to extend American trade.

Firms can not too soon appreciate the importance of advising the consuls of representatives in their territory. Recently one firm wrote this consulate as to the prospects for introducing its wares and sent catalogues and price list. This office, as is its practice, set out to interview dealers in that line, only to find after visiting a couple that the firm already had a representative here who supplied the local trade. Another firm wrote saying it had never sought this market; the result was that we found its goods in common use and could only suggest means to extend its trade.

A suggestion has been made at the consulate that American machinery for making rope and twine could find a market in England. There is no large industry of that kind in this consular district.

American automobiles are popular here and several are in use, but there is room for more of the cheaper priced cars. No change in construction seems necessary, as many users prefer the American styles to those made in England. Motor cycles are much used; but the question of price is important, as low-priced ones are made in England.

Exports to the United States.

The value of the articles invoiced through the American consulate at Leeds for shipment to the United States during 1911 was \$814,902, a decrease of \$83,413 compared with the previous year. The principal articles and their values for the two years were as follows:

Articles.	1910	1911	Articles.	1910	1911
Cocoa and confectionery.....	\$9,722	\$12,123	Oils and grease.....	\$58,124	\$31,754
Dyestuffs.....	24,147	20,021	Paper stock.....	5,265	9,450
Gas burners.....	53,469	40,492	Safety lamps.....	7,078	2,318
Hair.....	46,506	56,623	Steel rods.....	18,255	20,316
Hides and skins.....	8,891	5,826	Woolens.....	39,072	23,283
Household effects.....	7,085	4,270	Worsted.....	11,155	9,510
Iron.....	191,615	185,716	Yarn.....		
Leather.....	35,902	70,035	Cotton.....	6,320	6,282
Linens.....	6,274	5,545	Waste spun silk.....	8,353	6,413
Machinery.....	243,941	201,733	All other articles.....	81,216	91,904
Malleable castings.....	15,162	11,299			
Nails.....	21,058		Total.....	806,315	814,902

The shipments declared for Porto Rico were valued at \$85,910 in 1911, against \$98,762 for 1910. Those to Hawaii amounted to \$30,983, a gain of \$21,757 over 1910; and those to the Philippine Islands were valued at \$21,179, a decrease of \$1,978. Practically all the shipments to the American insular possessions consisted of agricultural machinery.

Destruction of Rats in Japan.

According to Consul George N. West, the Japanese city of Kobe is especially interested in the extermination of rats as a prevention against epidemics of plague. A reward of 2½ cents gold is offered for each one brought in, and last year 354,291 rats were killed on which this reward was offered. [A special list of Kobe importers of drugs and chemicals may be had from the Bureau of Manufactures.]

CHINESE GINSENG MARKET.

[From Consul General Amos P. Wilder, Shanghai.]

The best paying variety of ginseng in this market is the wild, from Chosen (Korea) or Manchuria, which sells at \$40 to \$150 per pound. The American and Japanese products range at much lower values in this market, their declared c. i. f. values per pound for 1910 being as follows in United States currency:

	Value.		Value.
American:		Japanese:	
Clarified—		Clarified—	
First quality.....	\$10.70	Third quality.....	\$1.00
Second quality.....	4.00	Fourth quality.....	.88
Fourth quality.....	.60	Crude—	
Crude—		First quality.....	2.50
First quality.....	2.20	Second quality.....	.75

It is not anticipated that the demand for the American product will increase very much as long as Japan and Chosen can maintain their proportions.

The amount of American ginseng, mostly clarified first quality, imported last year was 1,872 catties (2,496 pounds), valued at 40,790 haikwan taels (about \$26,514). The amount of non-American ginseng, mostly Japanese, imported last year was 64,969 catties (86,625 pounds), valued at 141,561 haikwan taels (about \$92,015).

The customs duty per catty (1½ pounds) on ginseng is given in the following table in haikwan taels. The value in United States currency of the haikwan tael varies as silver fluctuates, being placed at \$0.667 by the United States Treasury on January 1, 1912.

Classification.	Duty.
Clarified or cleaned:	Taels.
First quality, value exceeding 11 taels per catty.....	1.100
Second quality, value 6 to 11 taels per catty.....	.375
Third quality, value 2 to 6 taels per catty.....	.220
Fourth quality, value not exceeding 2 taels per catty.....	.080
Crude:	
First quality, value exceeding 2 taels per catty.....	.220
Second quality, value not exceeding 2 taels per catty.....	.072
Wild, 5 per cent ad valorem.	

[From Vice Consul Thomas P. Thompson, Foochow.]

The present prices for American ginseng in Foochow range from \$3.58 to \$13.43 gold per pound, depending upon the quality, size, color, and shape of the roots. The smaller roots at \$3.58 a pound are most desired here. Of the American ginseng, the red-colored wild roots bring the highest prices, while the large cultivated roots are not desired, as customers often mistake them for false ginseng. The wild American root is worth 30 per cent more than the cultivated, and the Korean about 50 per cent more than the wild American. The market for American ginseng is not very large at present, owing to financial conditions and the cheapness of Japanese ginseng. There are no regular foreign dealers in ginseng at this port, the trade being entirely in the hands of Chinese, who import from Hongkong.

American ginseng is commonly known here as Hsiyang (Western Ocean). It is divided into two kinds, Lau Shan (Old Mountain) and Hsin Shan (New Mountain). There is a kind of ginseng raised in

Japan which is known here as Shih-ki (Small Fountain). It is white and hard and attractive in appearance, but is much inferior to the American ginseng. It is cheaper than other varieties. A kind of Korean ginseng is considered the best and is sold for the highest price, being mostly favored by high officials and rich men of this place.

[From Consul General George E. Anderson, Hongkong.]

Hongkong Market Depressed.

The revolution in China has seriously interfered with the imports of ginseng, and for the past five or six months the Hongkong market for the root has been greatly depressed. While this is the chief market of this drug, the chief consumption is in North China. Owing to the disturbed condition of affairs in that portion of the country, particularly dangerous for such valuable goods as ginseng, it has been difficult to distribute the stocks imported and the ability of consumers to buy has also been impaired. The ginseng imports into Hongkong during 1911 amounted to about 84,000 pounds, practically all of which came from the United States. The total imports in 1910 amounted to 94,000 pounds, in 1909 to 160,800 pounds, and in 1908 to 145,933 pounds. Japan and Chosen (Korea) furnished a considerable portion of the supply in the earlier years, but at present absorb all their production in home consumption or in limited direct export to North China.

Prices during the earlier portion of 1911, and in fact until the revolution broke out, were firm and stocks ran rather low, amounting to only 14,000 pounds at the beginning of the sale season in March, 1911, as compared with 47,400 pounds in stock at the same time in 1910 and 45,400 pounds in stock in March, 1909. At the close of 1911 stocks ran down to 9,799 pounds and prices had fallen off, on an average, about 65 cents gold per pound from those of the same season a year ago. By the last of January, 1912, stocks increased to 18,200 pounds, and on the Chinese New Year (Feb. 19) they amounted to 22,000 pounds. So long as stocks continue to increase, with demand more or less quiet, low prices may naturally be expected, but the dealers agree that with the resumption of normal conditions, particularly in North China, there will be an increased demand and probably a rapid advance in prices. The record of the past Chinese year in the trade was not satisfactory, in spite of satisfactory prices, for the volume of supplies was small during much of the season, and a portion of the time the quality was not such as to bring the best returns.

URUGUAYAN PUBLICITY BUREAU CREATED.

[From American Minister Nicolay A. Grevstad, Montevideo.]

At the extra session of Congress a publicity bureau, under the Department of Industries, was created for making known the resources of the country and arranging for the exposition of its products in other lands. The director's annual salary is fixed at 3,000 pesos (\$3,102), two section chiefs receive 1,200 pesos (\$1,240.80) each, and four assistants draw 480 pesos (\$500.64) each. The translator at 840 pesos (\$868.56) and a photographer at 960 pesos (\$992.64) complete the staff of the office. The annual budget of the bureau aggregates 38,460 pesos (\$39,767.64), which does not include traveling expenses.

ICELAND WOOL.

[From Consul Augustus E. Ingram, Bradford, England.]

The sharp fluctuations in the value of Great Britain's imports of sheep's or lambs' wool from Iceland and Greenland is seen in the following official statistics:

Fiscal years.	Total im- ports.	Total value.	Average value per pound.
	<i>Pounds.</i>		<i>Cents.</i>
1906.....	276,466	\$40,027	14.47
1907.....	202,377	43,876	21.68
1908.....	273,910	32,533	11.88
1909.....	365,576	54,841	15.00
1910.....	133,126	25,846	19.41

Recent developments and suggested changes in the wool industry of Iceland are set forth in the following clipping from a local newspaper:

Iceland wool is perhaps most generally known as a knitting material suitable for making articles like "clouds and fascinators," while the coarser portions are of value in making high-class pile carpets. The production is some 2,000,000 pounds a year, and the quality is roughly divided according to districts; that from the eastern side of the island the finer, and that from the western the coarser, more kempy, and cotted. Much of the clip is consumed in the United States, into which country Iceland wool is allowed entry on the same terms as Scotch black-faced, Donskoi, Asiatic, East Indian, and other low wools, and is shipped by Danish and English merchants.

With the object of gathering information useful to growers of this wool, Mr. Einarsen, of Reykjavik, was sent to England and to America by the Iceland administration, and certain recommendations have been made to the Government by him: (1) That wool be washed at a central station to remove all but 8 or 10 per cent of grease, thus doing away with the system under which each farmer washes his own wool. (2) That suitable washing machinery for the station be obtained. (3) That the wool be well prepared before washing by the removal of gray wool and dirt. (4) That all Iceland wool be marked with an export trade-mark and a number indicating the district of origin. (5) That all wool be divided into grades: First grade, to be all white and well-washed wool, free from stained fiber; second grade, to consist of stained and badly-washed wool and britch locks; third grade, black wool; fourth grade, mixed gray and black. It was further recommended that skin wool should be kept separate from fleece, and that Icelandic exporters should sell and ship their produce to American manufacturers direct and without the intervention of middlemen.

Iceland is a Danish dependency, and it is possible to recognize in these recommendations for a cooperative washing station, an export trade-mark, careful grading, and direct dealing an echo of the policy that has been adopted in the butter trade and in other Danish agricultural affairs.

American Imports of Iceland Wool.

Iceland wool is embraced in class 3 of the American customs wool schedule. The official records of the United States show imports of unmanufactured wool from Greenland, Iceland, etc., as follows:

Fiscal years.	Total im- ports.	Total value.	Average value per pound.
	<i>Pounds.</i>		<i>Cents.</i>
1906.....	342,415	\$83,230	24.59
1907.....	776,830	198,264	25.52
1908.....	170,108	41,032	22.91
1909.....	390,385	48,850	12.51
1910.....	683,166	123,061	19.14

There were no imports from these islands in the fiscal year 1911.

STEAMSHIP SERVICE FOR TRIPOLI-IN-BARBARY.

[From Consul John Q. Wood, Tripoli, North Africa.]

A new steamship service has been instituted by the Società Nazionale di Servizi Maritimi between Syracuse, in Sicily, and the port of Tripoli-in-Barbary. The new steamer *Tripoli* is making two weekly trips, leaving Syracuse on Saturdays and Tuesdays at 6 p. m. and arriving at Tripoli on the following days at 4.50 p. m. The return trips are on Mondays and Thursdays at 11 a. m., and the vessel arrives at Syracuse at 9.50 on the following mornings. One can thus leave Rome Fridays and Mondays and reach Tripoli in 45 hours and vice versa. A new steamer is being built especially for this run, so as to cut the time down to 30 hours.

The steamship company has established a branch office in this port on account of the increased traffic and will equip its new apartments with office furniture, a part of which should come from America. The main office is located in Genoa.

The company's regular service will be maintained under the following schedule: Line VIII, Naples-Tripoli and return (weekly); Line XIX, Genoa-Cagliari-Tunis-Tripoli and return (weekly); Line XX, Genoa-Naples-Tripoli-Tobruk and return (weekly). It is expected that a direct service will also be established between Benghazi and Syracuse. This would take away the importance of Line XX, which runs along the coast, touching at Benghazi, Derna, and Tobruk.

In addition to the above schedule of sailings for Tripoli, there is a weekly service between Marseille, Tunis, and Tripoli conducted by the French Touaché Line, subsidized by the French Government.

EFFECT OF COAL STRIKE ON POTTERIES.

[From Vice Consul Roger C. Trevellick, Burslem, England.]

Interest in the use of substitutes for coal in firing pottery kilns has been aroused by the coal strike, which threw out of employment about 30,000 miners in the north Staffordshire coal fields and so handicapped most of the 220 potteries in the federated borough of Stoke-on-Trent that 50,000 pottery workers lost employment. Owing to the proximity of the coal fields few pottery manufacturers ever lay in a large stock of fuel.

One large manufacturer here who has been experimenting with oil and other fuels has succeeded in firing enamel kilns by means of a mixture of waste slack and a chemical compound, which is a trade secret. Owing to the use of this valuable invention the concern has been put to little inconvenience by the coal strike and has kept 800 of its employees at work. The firm is also experimenting with a new method of firing biscuit ovens. For this purpose a mixture of best coal, marly slag, and a chemical compound is used. The marly slag, it is said, is usually rejected at the coal mines, owing to its lack of ordinary combustible qualities.

Much has been said concerning the possible use of oil for firing potters' ovens, but so far as can be ascertained few efforts in this direction have been made here. One of the oldest and most prominent manufacturers informs me that his firm is planning to use oil for its boilers in the future.

BRITISH ENTERPRISE IN BUENOS AIRES.

[From a textile correspondent in London Financial Times]

The decision of a metropolitan firm of distributors to register a small South American company under Argentine law, with a capital of £25,000 (\$121,663), is viewed with satisfaction by leading export firms who have for some years observed with growing uneasiness the development in Buenos Aires of large distributing businesses controlled by Spaniards, French, Germans, and Italians. Some of these concerns, originally established as retail organizations, have added wholesale departments, and many of their purchases of fancy goods, hosiery, and made-up articles are made on the Continent.

Argentine People Seek High-Priced Goods.

Paris has for a long time irresistibly attracted the South American buyer, where he pays high prices for goods often of English origin. At the same time Manchester, Bradford, Belfast, and other centers in the United Kingdom have of late years increased their business in piece goods, although not in proportion to the great Argentine developments alone rendered possible by the investment of many millions of English capital in the railroad and other undertakings of the Republic. The prevalence of the Spanish language and of a large Italian population in Argentina has greatly assisted the efforts of textile exporters in Barcelona and the Italian centers. The latter now possess a special trade with South America in colored cotton suitings and trouserings, Busto Arsizio being the chief seat of manufacture. Italian bleached shirtings are also making some headway in South America. At Monza, in Italy, where there is a good deal of hand-loom weaving, there is a moderate output of tapestry and upholstery cloths, much of which goes to Buenos Aires, as do fancy waistcoats of cloth woven at Chieri. The bulk of the Italian export trade in cloth is done through shippers in Milan and Genoa, a large business, however, passing through houses in Manchester, Hamburg, and Paris. Some of the Italian manufacturers are directly represented in the Argentine capital, with which a large trade is done.

Wealth in Evidence.

It may be added, in connection with the London project referred to above, that Buenos Aires shops are filled with beautiful and costly goods, that daintily attired and bejeweled women with splendid equipages throng the shops of the city at certain hours, and that the prosperity of years is clearly visible in the daily life of the largest center of population south of the Equator. Buenos Aires is much more to Argentina than is Paris to France, and it certainly offers room for the energies of a certain class of distributors. It need scarcely be stated, however, that local knowledge is necessary, and this can chiefly be found amongst the representatives of the great export houses in the leading textile export centers.

NEW GREASE EXTRACTOR.

A new German system for the extraction of grease from animal offal is based on extraction by naphtha or some similar solvent. The material under treatment is placed in a closed digester, into which is pumped the solvent, previously vaporized and heated. As the gas comes in contact with the moist cold surface of the offal some of it is condensed and filters down to the bottom of the vessel, taking with it a certain proportion of fat and moisture. This product is then passed to a distiller, where the solvent and the water are evaporated and sent to the condenser, while the fat or oil remains behind. This procedure is continued for 8 or 10 hours until the material is dry and free from grease. It is stated that at Oldenburg, where the first plant of this kind was erected, the fat obtained is of a light-yellow color, and is used by soap factories at Hamburg, while the residue finds a ready sale in the form of meat meal for feeding pigs and poultry. If desired all but 1 or 1½ per cent of the fat can be removed, but in practice it is found more economical as regards coal and solvent to allow about 2½ per cent to remain.

MAILING ADVERTISING MATTER TO AUSTRALIA.

[From Consul Henry D. Baker, Hobart, Tasmania.]

Officials of the Hobart post office have informed me that a considerable amount of advertising matter from the United States, including catalogues and periodicals issued as the trade organs of different firms, reach Tasmania without any provision for the payment of duty thereon.

In the case of about 90 per cent of such advertising matter the persons to whom it is addressed decline to pay the tariff charges and delivery is not accepted; therefore, unless American firms will arrange for payment of duty, it would be better for them not to go to the trouble and expense of sending it here.

Australian Tariff Charges.

The duty on manufactures of paper having advertisements thereon, including price lists, trade catalogues, show cards, posters, etc., is, under the Australian tariff act, 12 cents per pound or 35 per cent ad valorem, whichever yields the highest return. The money necessary to cover the duty on advertising matter sent to Tasmania (or to any part of the Commonwealth of Australia) may be sent to the deputy postmaster general of the State to which it is addressed, and the matter mailed should then be marked on the wrapper to the effect that the amount of the duty has been forwarded under separate cover to that official.

Magazines or trade papers are admitted into Australia free. When the primary object of such publication is to furnish general information, and it can be used, acknowledged, or sold as such, the fact of its containing a number of advertisements will not make it dutiable. However, when the primary object is clearly that it should be used as a vehicle for disseminating advertisements or calling attention to the advertisements of articles for sale, it is deemed dutiable as advertising matter. All circulars or market reports are dutiable as advertising matter except when merely quoting the ruling prices of products, without intending to advertise any one firm or person, in which event they may be admitted free.

Many pamphlets and booklets extolling patent medicines, issued by manufacturing chemists in the United States, never reach the persons to whom they are addressed in Tasmania. Advertising literature that makes extravagant claims as to the curative properties of medicines is barred from admission into Australia under the trade and commerce act, which forbids any untrue or misleading descriptions of goods intended for this market.

Waiving Duty—Short-Paid Postage.

When the total duty on any one mail addressed by any one American consignor to any one State of the Commonwealth does not exceed 24 cents, payment of duty is waived. If duty on advertising matter is not paid by the American firm sending it, the addressee, in order to receive it, must pay the duty by means of postage surcharges, ranging from 2 cents for 3½ ounces up to 12 cents for 16 ounces. In case the consignor has an agent in the Commonwealth, the duty may be paid by such agent on the total weight of any one mail.

There is considerable complaint here that mail from the United States does not bear sufficient postage and so requires payment of

penalty postage on the part of the recipients. Many American firms appear to think that the postage to all British possessions is the same as to the United Kingdom, and so put only a 2-cent stamp on a letter that requires a 5-cent stamp. This is not only very annoying to persons here receiving many American communications, but it also occasionally creates enough delay in delivery to prevent, in the case of urgent letters, reply by the following mail. Letters arriving in Tasmania by the San Francisco mail have only half a day to be answered before the mail for the United States goes out via Vancouver, so that with such close connection delay arising from insufficient postage may occasionally result in great inconvenience.

ITALIAN CHEESE-MARKING REGULATIONS.

[From Consul Leo J. Keena, Florence.]

A new law relative to the marking of adulterated cheeses will go into effect in Italy on June 5, 1912, of which the following provisions are part:

The stamping of the word "Margarinato" and the trade-mark of the factory on the cheese must be clear, indelible, and made with a stamp containing letters of such a size as to be easily read. If this marking is altered or hidden in further handling, whoever shall offer the cheese for sale is required to restore the original marking so as to make it perfectly legible.

Cheese containing margarine must be entirely colored outside in red, with an aniline color called by the trade "Rosso Scarlatto Vittoria." This coloring must be done before the cheese leaves the factory or is exhibited for sale. If the color is altered or weakened in its later handling, it must be restored by whoever offers the cheese for sale.

Each year the Ministry of Agriculture, Industry, and Commerce will indicate the bureaus of chemistry authorized to make cheese analyses, outlining the district for each laboratory, to which samples of all cheese inspected must be submitted.

[The full law, in Italian, and a translation of the inspection requirements may be obtained from the Bureau of Manufactures.]

PIG PRODUCTS IN SCOTLAND.

[From Consul Howard D. Van Sant, Dunfermline.]

A considerable business in the tanning of pigs' hides is done in Scotland. In curing the best Wiltshire bacon, the hides are not removed, but in preparing the other grades the hides are taken off. When tanned, these hides are used for saddle leather, book bindings, purses, and furniture coverings. There seems to be an increasing interest in pig raising in Scotland. It is said here that the best grade Scotch bacon can not be excelled. The sales of American bacon in this country are also steadily increasing, and American lard is finding favor among the buyers of high-class pork products. A large share of the nearly \$100,000,000 worth of bacon and allied products imported into the United Kingdom during 1911 was for Scotland, the trade increasing particularly during the winter months when the demand increased on account of the higher prices of meats. The competition for the Scotch trade appears to be keen among the American, Canadian, Australian, and Argentine shippers, and the home producers are trying to enlarge their stock to meet this increasing trade.

ELECTRICITY IN BRITISH MINING.

In a paper on the use of electric power in the working of coal mines, read before the Manchester (England) Geological and Mining Society, Charles D. Taite said that the aggregate horsepower supplied to collieries in Lancashire by the Lancashire Electric Power Co. was at present about 3,000, and this would shortly be increased by work in hand to about 4,000. For some reason Lancashire had been slower to adopt electrical methods than other colliery districts. In the Newcastle district the three power companies were supplying electrical energy at the rate of over 55,000,000 units per annum for colliery purposes. In South Wales 12,500 horsepower was being taken from the power company's mains, and a further 3,500 horsepower was contracted for. In the Clyde Valley district about 8,500 horsepower was either connected or contracted for, while in Yorkshire the present connections were 4,000 horsepower, with an additional 2,000 horsepower contracted for; included in these supplies were three winding gears and three more were to be installed. Possibly the age of the pits had something to do with the backward condition of Lancashire collieries electrically, but where coal was most difficult to win the most modern methods were essential in order that the costs might be kept at the lowest possible figure.

FIRST ANNUAL NATIONAL GAS ENGINE SHOW.

The first annual National Gas Engine Show, to include everything in gas power and allied lines, will be held in Milwaukee, Wis., June 17 to 22, inclusive, in connection with the convention of the National Gas Engine Association. This is in accordance with plans laid at the last meeting of the association in Cleveland. The place of the show will be the Auditorium, where about 100 exhibition spaces have been laid out.

The central portion of the main floor will be devoted entirely to engines of various kinds, and these will be shown in actual operation on gas or gasoline. All engines will be suitably muffled and shown under actual running conditions, a feature that will make the show absolutely unique in exhibits of gas engines. Outside of State and county fairs, it has heretofore been almost impossible to make arrangements to show engines in operation on their natural fuels. Not only will there be shown the stationary or heavy-duty type of engine, but there will also be the small farm engine, the marine and automobile and possibly aeronautic motor. Space adjoining the building will provide an arena for tractor exhibits.

Surrounding the engine spaces will be spaces allotted to the manufacturers of accessories, showing batteries, spark plugs, coils, magnets, lubricators, and all allied or accessory lines.

Exterminating the brown-tail moth.—Consul Charles A. McCullough, of St. Stephen, reports that a vigorous campaign of extermination is being carried on in the Canadian Province of New Brunswick by the division of entomology against the brown-tail moth, about 2,100 nests having been taken up to March 22. The consul's complete report on this subject has been forwarded to the Department of Agriculture.

TAX LEGISLATION IN URUGUAY.

[From American Minister Nicolay A. Grevstad, Montevideo.]

The Uruguayan Congress recently passed a law concerning the taxation of real estate in all Departments of the Republic except the Department of Montevideo, where the assessment and taxation of real estate and real property are governed by special legislation. This law may be regarded as a codification of several previous enactments, which are annulled or repealed by it, and as an attempt at creating a better and more complete system for the assessment and taxation of rural, urban, and suburban real estate in the specified 18 Departments.

Under the law, the tax is assessed on the value of the property, which, as regards urban and suburban property, means the value of the soil and improvements of all kinds; while the tax on strictly rural property is assessed on the bare value of the land without improvements or crops. The tax rate for the fiscal year 1911-12 is fixed at 6½ mills.

Revision of Assessed Values.

The owner of real estate or lands is granted the right to demand a revision of the assessment up or down. That it should be considered a privilege to be permitted to pay a higher tax than that assessed by the proper authorities may appear somewhat strange at first sight. The explanation is found in the doctrine prevailing here that the assessed valuation represents the true value of the property at condemnation proceedings. The owner is supposed to pay taxes on the true value, and his acquiescence in an assessment binds him to accept a price not exceeding that value whenever the property is needed for public purposes. The result is that in this country the owner is always anxious to aid the assessor in listing his property at its true value, or a little above rather than below the real value.

A notable provision of the law enacts that owners of farm lands, not exceeding 50 hectares (123.55 acres) in extent, of which at least 60 per cent is devoted to agriculture, may be permitted to pay only 50 per cent of the tax, without incurring any risk at condemnation sales on that account. The penalties assessed against delinquent taxpayers are unusually high under the new law.

[A translation of the new law is on file in the Bureau of Manufactures.]

SISAL FROM HAWAII.

[From the Honolulu Bulletin.]

Sisal is coming to the fore as an island product that in a short time will be one of the chief exports from the Territory. The new sisal mill that is to be located at Poughala will have the latest in the line of machinery for preparing the fiber.

The sisal company will have two mills to take care of the plants that are growing on the 1,150 acres that have been planted. There are some 700 more acres yet to be planted. From 45 to 60 bales a month have been going out of the Territory, the most of it being shipped to the Tubbs Cordage Co. at Oakland, Cal. In March, 1912, the sisal company made its first shipment of sisal to the Portland Cordage Co. at Seattle. The bales weigh about 600 pounds, worth about \$100 a bale.

Coal was retailing at St. Michaels, Azores, at \$14 per ton in mid-March, reports Consul Creevey. A special list of dealers there may be had from the Bureau of Manufactures.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8499. Machinery for extracting oils.**—An American consular officer in Canada reports that a business firm in his district is interested in machinery for the extraction of vegetable, animal, and fish oils, with a view to obtaining the agency for a good line covering the territory in which it does business.
- No. 8500. Portable wooden houses.**—An American consulate in Mexico has been requested by a local commission merchant to furnish a list of American manufacturers and exporters of portable wooden houses, to be shipped knocked down and ready for assembling at port of destination. The same person wishes to be placed in communication with buyers of the following articles: Tortoise shell, chicle, cedar, mahogany, guayacan, and ebony. Interested persons should address the inquirer direct, and correspondence should be in Spanish.
- No. 8501. Army shoes and blankets.**—A business man in the Levant informs an American consular officer that he would be pleased to receive catalogues and prices from American manufacturers of shoes and blankets, suitable for use in the army.
- No. 8502. Outfit for a string factory.**—An American consular officer in the Near East reports that a resident of his district would like catalogues and prices of a complete outfit for a string factory, 20 to 25 horsepower, water development.
- No. 8503. Sawmill machinery.**—The sawmill of a Canadian lumber company, valued at over \$75,000, was recently destroyed by fire, together with considerable quantities of lumber. An American consular officer states it is probable the company will rebuild the mill at once, and manufacturers of sawmill machinery would do well to take up the question of equipment for a new mill with the company at once.
- No. 8504. Plant for manufacture of sheet zinc, etc.**—An American consular officer reports that a business firm in Mexico is planning a plant for the manufacture of lingots of zinc, refined and crude; zinc dust; zinc in filiform; and the alloying of zinc in lingots as well as sheet zinc. It would be well for Americans who manufacture such equipments as are necessary for this plant to correspond direct with the company named in the report.
- No. 8505. Wire-rope fittings and attachments.**—A business firm in Canada informs an American consular officer that it desires correspondence with manufacturers of steel and malleable iron clamps, clips, open and closed sockets, and other fittings and attachments for use in connection with wire ropes. American manufacturers should give this matter attention at the earliest possible moment, as an immediate reply is desired by the firm in question.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 567. Motor generator sets and controlling panels.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until April 27, 1912, for two 100-kilowatt motor generator sets and controlling panels at the navy yard, Puget Sound, Wash. Specifications can be obtained on application to the bureau or to the commandant of the navy yard named.
- No. 568. Lock keepers' houses.**—Sealed proposals for building two 2-story 7-room brick lock keepers' houses at Dam No. 28, Ohio River, near Huntington, W. Va., will be received at the United States Engineer Office, Wheeling, W. Va., until April 27, 1912, and then publicly opened. Information on application to F. W. Altstaetter, Major, Engineers.
- No. 569. Officers' quarters.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until May 4, 1912, for one officer's quarters at the navy yard, Boston, Mass. Plans and specifications can be obtained on application to the bureau or to the commandant of the navy yard named.

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CHINA'S COMMERCIAL AND INDUSTRIAL PROGRESS.

[From Vice Consul General W. Roderick Dorsey, Shanghai.]

An analysis of the chief articles of import into China, based upon the customs returns of 1910, from which analysis Hongkong has been excluded except in those cases where it is known to produce and is a bona fide supplier to China, shows that out of 129 items Great Britain holds first rank with 43, Japan 30, United States 13, Germany 9, and Belgium 7. Great Britain was placed second 13 times, Japan 20, United States 7, Germany 17, Belgium 5; and in third place Great Britain is seen 7 times, Japan 14, United States 7, Germany 8, Belgium 6. This establishes the fact that the energetic operations of American producers are confined to a more limited field than those of their principal competitors, Great Britain, Japan, and Germany. [A statistical review of China's foreign trade during 1910 was published in Daily Consular and Trade Reports on Oct. 28, 1911.]

There was an extraordinary outward movement of China's raw cotton in 1910; both quantity and value having about doubled, 166,271,200 pounds, valued at \$18,573,214, representing this country's unusual contribution to the world's markets. High prices in America and India engendered a strong demand in Japan for the Chinese fiber. By reason of such unprecedented foreign demand local supplies were dearer than ever before, and mills were obliged to bring in Indian cotton to meet their requirements.

Cotton Cultivation—Iron Works.

An interesting feature of this trade is the increasing production of the staple in North China. Cotton moving from Tientsin to native and foreign ports in 1910 amounted to 16,666,600 pounds, five times as much as was shipped through the same port in 1909. Hankow, whose shipments of raw cotton have of recent years shown decreases, came forward with an increase of 22,750,000 pounds. The short crops in other countries and the high prices offered to China seem to have tempted the growers in many sections, and this is doubtless responsible principally for the unprecedented sales. It is also true that larger

areas were under cotton cultivation than in the past, replacing opium, and these new sources have supplied a goodly portion of the yield.

It is well that this is so, for the farmer, convinced by this auspicious season that cotton is a profitable crop, will have less reason to persist in the precarious growing of the opium plant. Official encouragement has been given to founding associations to study cultivation of the plant. In several Provinces, principally Szechwan, Shantung, Chihli, and Yunnan, officials have distributed seeds, both native and foreign, without cost, and have sent instructors to teach the farmers improved methods of cultivation. Particular success is said to have attended the experiments carried on in Chihli Province.

The Hanyang Iron Works at Hankow had a busy year and are still unable to meet the demand, notwithstanding the fact that an additional blast furnace was opened in May. According to the report of the Hankow Commissioner of Customs 130,000 tons of pig iron were turned out during 1910, of which 29,000 tons went to Japan and 15,000 tons to the Pacific coast of America. Japan desires a greater supply, and America is making a strong effort to become a larger buyer, as it is claimed that the steel manufactured from this iron has proved to be of the finest grade. These works also turned out 33,250 tons of rails and fastenings for use on China's railways (an increase of 5,000 tons over 1909), which are said to be of such excellent quality that the works voluntarily subjected them to a much more severe test than is required by foreign countries.

Imperial Post-Office Service.

The following table presents a comparison of the workings of the Imperial Post Office from 1907 to 1910:

	1907	1908	1909	1910
Offices open.....	2,803	3,493	4,258	5,357
Articles handled.....	168,000,000	252,000,000	306,000,000	335,000,000
Parcels handled.....	1,920,000	2,455,000	3,280,000	3,768,000
Native clubbed letters.....	6,363,000	8,042,000	8,411,000	7,409,000
Registered articles.....	15,533,000	19,802,000	25,598,000	29,013,000
Express letters.....	221,000	317,000	908,000	1,832,000
Collected from letter boxes, etc.....	8,113,000	11,099,000	16,044,000	20,068,000
Value of money orders issued.....	\$1,443,660	\$1,675,700	\$2,042,720	\$2,323,200

A feature of the year's work, as pointed out by the Postal Secretary, has been the extension of postal enterprise in Manchuria, Sinkiang, Mongolia, and Tibet. The long-contemplated increase in the tariff for domestic letters occurred in the autumn of 1910. The inland rate was fixed at 3 cents Mexican per letter; the unit of weight being raised at the same time for all letters, foreign and domestic, from 15 to 20 grams, which not only smoothed the way for the higher rate but brought the Chinese post office nearer to Union practice.

The figures concerning newspapers and printed matter carried between ports and the interior are interesting. Their number has risen from 10,000,000 in 1905 to 84,000,000 in 1910, and, coupled with the annual increase in letters, indicates China's widespread educational advancement.

Ore Sales—Railways, Telegraphs, and Telephones and Posts.

The output of the Tayeh iron mines, worked in conjunction with the Hanyang plant, was 303,000 tons, of which 106,000 tons went to Japan. The ore sold by the Tayeh company to Japan formed 75 per

cent of all the ore exports from China. Lead ore increased by 1,253 tons, zinc ore by 2,432 tons, and antimony ore by 5,494 tons.

The total length of Chinese railways open to traffic on December 31, 1910, including Manchurian lines, was 5,217 miles. This compares with 4,500 miles in 1909 and 3,900 in 1908.

No change in rates of the Imperial Chinese Telegraphs was made during 1910. Several additional lines, those of Kwangtung, Kwangsi, Yunnan, Kweichow, Shansi, Mongolia, and northern Chihli, were brought under Government administration, and long-distance telephones were provided between Yinkou, Haicheng, Liaoyang, Mukden, and Hsinmintum. It is proposed also to open telephonic communication between Yinkou, Chinchow, and Shanhaikwan. No addition was made to the wireless stations; the one installed at Shanghai in 1909 has not given great satisfaction.

The Imperial Post Office made further progress in 1910. Routes were increased by 17,300 miles, those served by couriers aggregating 95,600 miles, by native boat 8,000 miles, by steamers 8,700 miles, and by railways 5,000 miles, a total for the year of 117,300 miles. Offices and agencies advanced from 4,258 in 1909 to 5,357 in 1910.

Valuable Coal Mines.

While China has not yet recast its mining rules in such a way as shall offer no impediment to the attraction of foreign capital, such mines as are now working under foreign control, and some that are not, continue to make progress. There are no Government statistics pertaining to minerals save those concerning exports through the Imperial Maritime Customs. The following figures relating to coal have been gleaned from returns of the principal collieries now employing foreign methods and are fairly accurate:

Mines.	1909	1910	Mines.	1909	1910
	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>
Kaiping.....	1,361,730	1,209,000	Hungshan.....	160,000	232,040
Fushun.....	730,000	1,200,000	Pao Hsin.....	100,000	1120,000
Pen Hsi Hu.....		120,000	Ching Hsing.....		365,000
Pingsiang.....	520,000	640,000	Lanchow.....		1300,000
Fangtze.....	272,000	229,340			
Weihshen.....	244,370	357,200	Total.....	3,588,100	4,991,540
Lincheng.....	200,000	219,000			

¹ Estimated.

There are other deposits of coal operated by natives in primitive fashion in many parts of China, but there is no way of even estimating their output. A rich vein is reported to have been found in the Lushan, or Mountain of Lu, in Kiangsi, which the local gentry propose to work as soon as sufficient native capital can be raised. Coal is known to exist abundantly in Shansi and Szechwan and elsewhere throughout the country and only awaits scientific working to place China high up in the list of coal-producing nations.

Iron, Tin, and Other Mines.

The Tayeh mines are the only iron deposits being worked systematically. Their production of ore in 1910 was a little less than in 1909, when the output was 307,500 tons.

The tin mines at Kochiu, in Yunnan Province, with modern German ore dressing and smelting machinery and under German technical supervision, are the only deposits of this nature being developed

by up-to-date methods. Work was commenced during the year under review in the tin mines at No-doa, in the island of Hainan, and some degree of success is reported to have been met with, although crude processes of mining are employed. The ore is said to run about 60 per cent and finds its way principally to Hongkong. The total export of tin from China in 1910 was 7,175 tons, valued at \$4,133,310, as compared with 4,978 tons, valued at \$2,599,048, in the preceding year. America is a good buyer of this product, as also is Europe.

Apparently there was no development of gold, silver, or copper deposits during the year under review. Szechwan, Shensi, Kansu, and Chihli, as well as Mongolia, Manchuria, and Tibet, are said to have gold and silver within their borders, and Yunnan has copper.

The mineral oil which was discovered a few years ago in Shensi is reported to find ready sale in Sianfu, the provincial capital. This oil is claimed to be very clear and to emit no odor when burning. Few wells have been sunk so far, and the output is inadequate to meet local demands; but Shensi capitalists who promoted the industry and whose resources are limited decline to admit outside funds, and so what is thought to be a rich deposit is restricted in output. There are also, it is claimed, valuable petroleum fields at Boulai in Szechwan.

New Enterprises.

Reports from various parts of China indicate that new enterprises of various kinds are springing up. At Shanghai a new flour mill, equipped with American machinery, with a capacity of 400 barrels per day, was added to the list. One candle factory, with a capacity of 50,000 per day, equipped with British machinery, was completed during 1910, and another was under construction with German machinery. Chefoo, too, records a candle plant with a small American equipment, and also celebrated the opening of a new winery, the Chang Yu, which served its products for the first time at the dinner given in that city to the American commercial commissioners, mention of which was made in Daily Consular and Trade Reports on December 16, 1911.

Electric-light plants were completed at Chapei, adjoining Shanghai (German machinery), Nanking (German), Chungking (British), and Mukden (American), while a plant at Changsha with German equipment was nearly completed and one was under construction at Changchun in which American machinery was being installed. Waterworks were finished at Chapei, and at Swatow a contract was awarded to a British firm for the construction of a plant. A paper mill was under construction at Hankow with British and American machinery, and the Hupeh cement works commenced operations at the same place. The raw materials for the latter, which are obtained locally, are reported excellent, and the output has met with a strong demand.

Foochow has a new canned-goods factory, which puts up fruits, fish, and other local products. Mukden boasts a new mint equipped with American electrical machinery, and Antung has a Japanese bean mill and a British-owned sawmill. Two cotton mills in Shanghai increased their loom installation, British machinery being employed.

This list must of necessity be far from exhaustive, for there are many small factories of various kinds constantly starting all over China, but it is difficult to get more than a general statement or rumor in most cases that such things are so.

CONSTRUCTION WORK ABROAD.

ARGENTINA.

[From Consul General R. M. Bartleman, Buenos Aires, supplementing item in Daily Consular and Trade Reports, for Mar. 30, 1912.]

New Thoroughfare for the Capital.

The bill authorizing the opening of a wide avenue to extend diagonally across the city of Buenos Aires from San Martin and Rivadavia Streets to the Plaza Lavalle, a distance of about 40 squares, has become a law. The plan is stupendous in its scope, as it involves the acquisition by the city of a vast amount of property in the business section, at a cost which now appears to be about \$200,000,000 United States currency.

CANADA.

[From Consul General David F. Wilber, Vancouver.]

Rapid Industrial and Municipal Development.

It would be appreciated if firms interested in these items would advise the consulate general of the fact, sending their catalogue if they desire, and also whether they are successful in obtaining business as a result of their inquiries. There have been cases where such action by manufacturers has enabled the office to later put them in touch with other opportunities, as their names are on file here and we knew them to be interested in obtaining business in British Columbia. Manufacturers having agents in this Province should advise this office of the agents' names and addresses.

Hydroelectric plants.—British Columbia has available great water power. Small plants are being erected by mining and other firms for their own use, and several hydroelectric plants have been reported from time to time by this office. If a canvass were made for the Province, it is probable that a number of towns or companies could be shown that it is to their advantage to make installations, particularly in view of the freight on coal and the cost of coal for generating power. The city of Kamloops has decided to install a hydroelectric plant at Barrier River, 40 miles north of Kamloops, and L. R. Lea, of Montreal, is named as the supervising engineer. It might be to the advantage of the manufacturers of hydroelectric equipment to send catalogues to the American consulate at Vancouver to be placed on file for the information of inquirers.

It is rumored that engineers have been surveying the Lillooet River for the British Columbia Railway of Vancouver, British Columbia, for a hydroelectric plant far greater than any now in the Province. No statement of its plans in this connection has been made by the company.

Among other hydroelectric enterprises are those for Prince Rupert and Penticton, on which construction work is being rapidly pushed.

Sawmills and brick works.—E. H. Heaps & Co. (office in Vancouver), whose sawmill at Ruskin was burned in 1910, are having it rebuilt for 200,000 feet daily capacity, with electric power. They are also to build a brick plant with 50,000 daily capacity, the kilns being heated by oil. The new Gilchrist brick plant at Ruskin will soon begin operation. With large numbers of buildings being erected in this developing Province, manufacturers of brickmaking machines should find a good market. Several plants were built last year. Any catalogue sent to this consulate of such machinery will be placed on file for the information of inquirers. It is reported that J. D. Winlaw will build and operate a sawmill at Howser Lake, north of Nelson, British Columbia.

A box factory is proposed at Creston, British Columbia.

Car factory.—It is stated that the eastern representative of the St. Louis Car Co., recently here on a visit, has recommended and will urge the building of a branch factory at Vancouver.

Lock and hardware factory.—The Canadian Lock & Novelty Co., said to be capitalized at \$100,000, is thought to have definitely decided to build a lock and hardware factory at New Westminster. It can be addressed in care of the secretary of the Board of Trade at New Westminster, British Columbia.

Waterworks.—The District Council, meeting at Lynn Valley, British Columbia, resolved: "That the district engineer be empowered to start work at once putting in

pipes on the streets necessary to supply water to those who have applied for same on the higher levels; also, that he proceed with the work of putting in the necessary intake, settling tanks, and reservoir for the water supply to the highest levels in Lynn Valley."

Car shops, etc.—Vancouver papers state that an electric railway will be built this year connecting all towns between Pincher City, Alberta, and Crows Nest; the car shops may be built at Blairmore, Alberta. The Keystone Portland Cement Co. has bought the smelter at Frank, Alberta. The company expects by next August to be turning out 1,500 barrels of cement every day.

Cement plant.—The McAlpine-Robertson Construction Co. (841 West Hastings Street, Vancouver, British Columbia) is the contractor and is reported ready for tenders for supplies and equipment for the Saanich Arm cement plant.

Fire equipment.—Fire Chief Carlisle, of Vancouver, British Columbia, has been instructed to call for tenders, to be all in by May 1, for the new fire apparatus provided for in the estimates for the current year. These include the following: One auto, \$3,500; two auto pumping engines, \$28,000; two auto city service trucks; one auto chemical engine, \$7,000; three auto hose wagons, \$18,000; new hose and nozzles, \$8,000; auto aerial ladder truck, \$15,000; machine shop, \$1,000; and blacksmith shop, \$500. Previous reports have been sent regarding auto fire apparatus for Nanaimo and North Vancouver.

Automobiles.—Two automobiles, one an ambulance, are contemplated in the estimate for the Vancouver police department, to cost \$6,200.

Road machinery.—It is stated that Mayor Lee and other officials of New Westminster, British Columbia, consider that their city is losing much money through old machinery for road making and repairing and will obtain appropriations for modern machinery to replace it.

Logging railway.—Robert McNair (1070 Melville Street, Vancouver, British Columbia), is reported to be constructing a 6-mile logging railway from Port Moody to Coquitlam Lake, to transport timber from the latter to tidewater.

Manual training.—The school trustees of South Vancouver, British Columbia, propose to introduce manual training, appropriating \$1,690 for the first equipment. Mr. Kirkland is secretary of the board. H. Donnell (Victoria, British Columbia), is the provincial inspector of manual training.

Coal-mine equipment.—It is stated that improvements which will cost \$1,000,000 are being considered by the Pacific Coast Collieries (Ltd.), in order to increase production and to provide better shipping facilities.

Fishing steamers.—Tenders for six wooden-hull oil-burning fishing steamers, to cost approximately \$100,000, are to be called for at once by the Canadian Fish & Cold Storage Co., of this city.

Ornamental street lights.—To install 898 additional ornamental street light standards recommended for the city of Vancouver will cost \$235,000, and it is expected that City Electrician Woodroffe will be directed to proceed with the work, so that installation may be begun this summer and completed before the end of the year.

Jails.—(1) It is thought that North Vancouver, British Columbia, will soon erect a city jail. (2) Three cells are to be added to the jail at Vernon, British Columbia. (3) It is reported that a new jail will be provided by the board of works of British Columbia at New Denver, as well as a record office and a bridge.

Drill halls.—It is considered assured that the Dominion Government will build a \$400,000 drill hall at Vancouver, British Columbia. Drill halls for Prince Rupert and Fernie were mentioned in Daily Consular and Trade Reports for March 16.

Hospitals.—(1) A hospital is to be erected at Masset, British Columbia. (2) An isolation hospital is being urged for North Vancouver.

Bridge.—The Province of British Columbia is considering a \$75,000 bridge across the Kootenay River at Nelson, pressed for by local people.

Water tank.—The municipality of South Vancouver has decided to construct a 100,000-gallon water tank on the municipal grounds.

CHINA.

[Nanking correspondence of Lim Boon-Keng in North China Herald.]

Rebuilding of Hankow.

Mr. Percy Tilley, a Shanghai architect, has gone to Hankow to assist in the drafting of plans for the rebuilding of the burned district into a modern model city. Since the political upheaval at Wuchang, and the subsequent burning of the native city of Hankow, that part of China, once the commercial center of the interior, has been reduced to ruins and deserted. As Hankow is not likely to be exposed by renewal

of hostilities, the board of industry of the Wuchang provisional government, President Sun Yat Sen, and the Chinese merchants of Hankow, notably Messrs. Chang Chan, Wu Pay Ling, and Sun Wei Chung, have formulated elaborate plans to transform the deserted city of Hankow into a commercial seat.

A new bund, with lofty buildings, wharves, broad roads, and other commercial facilities, will be the principal feature of the reconstruction. Thirty-four roads will be laid out. The landowners will contribute 10 per cent of their acreage for these highways and for sites for public buildings and parks. The landowners have been instructed to establish their claims to their respective holdings in the burned area, and new title deeds will be issued.

The Commercial Building Corporation will float a loan of 15,000,000 taels (\$9,200,000), guaranteed by the Republican Government, it is said, and this will provide for the erection of 30,000 houses.

INDIA.

[From the London Times.]

The Irrigation Program.

In the financial statement of Sir Fleetwood Wilson for the ensuing fiscal year, information was given as to the irrigation schemes sanctioned or awaiting approval. It was stated that, in addition to canals in operation, there are altogether 55 projects under construction, awaiting sanction, or being examined by the professional advisers of the Government of India. They include 26 works classed as "productive" and 23 classed as "protective," and are designed to irrigate 8.80 million and 1.18 million acres, respectively, at a total capital cost of \$150,000,000 for the productive and \$31,600,000 for the protective works. The former are estimated to yield a net return of 7.28 per cent on the capital. Satisfactory progress is being made with the greatest undertaking now in progress—the triple canal project in the Punjab; and Sir Fleetwood Wilson announced that the Upper Chenab Canal will be opened in May or at latest October, while the Upper Jhelum and Lower Bari Doab Canals will be ready in 1914. [Details of this construction appeared in Daily Consular and Trade Reports for Jan. 12 and Oct. 7, 1907, and Apr. 3, 1912.]

It was announced that the Ghaggar, Twante, Mahanadi, and Wainganga Canals have been sanctioned. The scheme for the first of these projects was submitted by the United Provinces Government, and the cost is estimated at under \$1,215,000. The Twante project is for a navigation canal along an important trade route in Lower Burma, to cost \$2,362,000. The Mahanadi and Wainganga canals will take off from those rivers in the Central Provinces, where at present State irrigation works are almost nonexistent. Their estimated cost is \$4,455,000.

The Government of India now have before them the detailed scheme for the introduction of perennial irrigation in Sind, of which the Sukkur Barrage will be the pivot, though the main outlay will be for the Rohri Left Bank Canal. Between them these works will cost not far short of \$21,900,000. The Cauvery Reservoir project [described in Daily Consular and Trade Reports for Jan. 25 and Dec. 28, 1911], estimated to cost \$12,500,000, is for the construction of an immense dam attaining a maximum height of 201 feet and an average height of 113 feet. It will impound sufficient water to irrigate 4,750,000 acres, and will bring into existence a vast artificial lake having an area of 58 square miles. Another most important scheme on the list for the near future is the Sarda-Ganges-Jumna feeder project. It is estimated to irrigate over 1,500,000 acres, when account is taken of the additional supplies which existing works in northern India will derive from it.

HAWAII.

[From the Honolulu Bulletin.]

Marine Barracks—Commercial Building.

The contract for marine barracks and officers' quarters at Pearl Harbor has been awarded to the Spalding Construction Co., of Portland, Oreg., at \$114,000, including fittings.

A large commercial building in Manila is planned jointly by the Merchants' Association, the Chamber of Commerce, Commercial Club, and the Stock Exchange.

New Buildings—Sewer Contract.

Building operations, although not up to the pace set during the last couple of months, continue fairly active, especially in the residential districts. Many foundations have been laid in the Kaimuki section, and a number of buildings are in course of construc-

tion. In the heart of the city the one-story shacks at the corner of Union and Hotel Streets have been demolished to clear the way for the new Brewer Building, and it is understood that a new building is contemplated to take the place of the old Art Theater that is being torn down. The old buildings on upper Fort Street are being cleared to make way for the new building to be put up by C. M. Cooke (Ltd.).

The Government has agreed to sign with Lord & Young for constructing the Wai-pilopilo sewer; contract price, \$54,157. About 3 miles of sewer will be put in.

New Sugar Mill for Philippines.

The San Carlos Milling Co. (Ltd.) is now being organized in Manila, capital \$400,000, to build and operate the sugar central at San Carlos, on the Philippine island of Negros, according to the proposition inaugurated a year ago by Alfred D. Cooper. The report of the expert who studied the question has been favorable. It is expected to have a 12,000-ton mill operating in 1913 on San Carlos Harbor, shipments being made by vessel. A 10-mile railroad will also be constructed.

TURKISH HANDMADE LACE AND EMBROIDERIES.

[From Consul General George Horton, Smyrna.]

The hand manufacture of lace, embroideries, and lingerie underwear is carried on, on a fairly large scale, in Smyrna and the neighboring villages. The fact that it has not been customary for female labor to be employed away from home has caused a large proportion of the women workers to give their time to manufacturing lace and embroideries. Their work is either taken around the town and disposed of by women dealers or sold to the trade, chiefly as piecework made under orders from dressmaking and underwear establishments. Girls working at home earn small wages as compared with those employed in the stores, the latter receiving 40 to 70 cents per day of nine hours.

It is also of interest that the Oriental Carpet Manufacturing Co. has a plan which may improve the condition of lace and embroidery workers of this district. This firm works in connection with owners of small looms in country regions, furnishing them with dyed yarns and other materials, supplying them with designs of carpets most in demand, and finding a market for the goods in England, America, and elsewhere; when necessary, even money is advanced. A similar exploitation of the lace and embroidery makers is contemplated, and it is hoped that there will in time be as large an output from this region as from Beirut, where these workers were first established through the aid rendered them by the American mission.

AMERICAN WHEAT SHIPMENTS TO JAPAN.

[From Consul General Thomas Sammons, Yokohama, Feb. 9.]

The Japanese press comments freely on the unusual large quantities of wheat now being shipped from the United States to Japan. During the past 60 days upward of 30,000 tons of American wheat have been consigned to this jurisdiction.

The prevailing duty on wheat imported into Japan is approximately 29 cents per 100 pounds and on flour 70 cents per 100 pounds.

An International Aviation Exhibition will be held at Vienna, Austria, May 18 to June 23.

MINERAL PRODUCTION OF BRITISH COLUMBIA.

[From Consul Frank C. Denison, Fernie, Canada.]

The preliminary report of the department of mines at Victoria shows a shrinkage of \$4,500,000 in the output of the British Columbia mines during 1911.

In the East Kootenay district there was a falling off of 605,000 tons of coal and 140,000 tons of coke compared with the production in 1910; but as the total coal shortage for the whole Province was but 365,000 tons, the output in other sections of British Columbia evidently advanced. A considerable falling off in the production of copper at the Granby and British Columbia smelters is also reported as the result of the coal strike, which shut off the supply of coke. Notwithstanding this loss in the boundary district, there was an increase of \$18,588 in the copper production of the entire Province. This increase comes from the coast district, where the gain for the year is given as 8,000,000 pounds.

Placer gold to the value of \$3,000 was taken from the Fort Steele district, practically all from the old placer grounds on Wild Horse Creek. The decrease in the gold production of the Province in 1911 amounted to \$925,915, the year's total output being \$5,120,465. Much of this loss is also attributed to the shutting down of the Granby and other smelters for lack of coke, considerable gold being secured from the copper ores reduced at those smelters; and the Rossland mines, also suffering from the strike, report shortages in their output.

Oil Fuel for Smelters.

Both silver and lead declined, due to the exhausting of the available ore body in the St. Eugene mine at Moyie. This shortage amounts to \$272,070 for silver and \$272,945 for lead, the total production being reported at 1,921,300 ounces of silver and 27,975,000 pounds of lead.

Developments at the Corbin coal mines, near the eastern boundary of British Columbia, about 40 miles from Fernie by rail, has resulted in stripping a large body of coal which the management is preparing to mine by a surface process similar to quarrying.

An interesting paragraph of the report from which this information is taken relates to the experiments being made at the Van Anda smelter on Vancouver Island. These experiments have been under the supervision of Thomas Kiddie, who states: "We used 157 gallons of oil in 2.33 hours, and 60 gallons for heating up, or 217 gallons in all. This gave an average of 14.6 gallons of oil per ton of material smelted, equal to 43.8 cents per ton of ore smelted. The rate of smelting was 110 tons per 24 hours." Mr. Kiddie thinks that with some changes the cost for smelting by this method should approximate 30 to 35 cents per ton of ore treated. [The United States Geological Survey states that California crude oil has been used for some time in reverberatory furnaces at McGill, Nev., and Cananea, Mexico.—B. of M.]

Deputy Consul General John C. Allen, of Monterey, reports that an Ohio tire and rubber company has arranged with the Government to establish at Mexico City a plant for manufacturing all kinds of rubber products, oilcloth, insulated wire, etc.

FUSEL OIL FROM SUGAR WASTE.

[From Consul General James L. Rodgers, Habana, Cuba.]

Inquiry is made regarding the production of fusel oil in Cuba. After careful inquiry it is evident that no attempt is made to save this valuable by-product by the distilleries of Cuba, which run on the large supply of molasses coming from the sugar mills. As far as I can ascertain this is more the result of lack of knowledge in the matter of the production of fusel oil rather than any intention to sacrifice value.

Among the distilling interests to which this matter has been submitted one company is very anxious to open correspondence with a view to securing the technical advice and assistance which would be necessary in developing this new feature of their industry.

The price of molasses in Cuba fluctuates from year to year, but it can be averaged safely at about $3\frac{1}{2}$ cents per gallon. All the available supply finds a ready market in Cuba, as it is used in local distilleries and is also shipped abroad in large quantities. In 1910 (the latest statistics available) the exportation of molasses from Cuba was in value \$1,477,756, of which over 60 per cent went to the United States and very nearly all the remainder to England.

Roughly estimated, the present-day distillation of alcohol of all grades in Cuba would be about 1,000,000 gallons annually. There are no accurate statistics available.

[Compiled in the Bureau of Manufactures from official sources.]

Fusel oil is a by-product produced in the distillation of alcohol from various substances, including grain, beet and cane molasses, and wood. Its chief use in the United States is in connection with the manufacture of explosives. It is also used in making artificial fruit essences. The total output of this oil in the United States was 110,792 gallons during 1910, the last year for which figures have been compiled by the United States Internal-Revenue officials. This figure was exceeded only by the record year, 1907, when 124,709 gallons were produced. As the production of spirits distilled from other materials than fruit increased from 163,893,960 gallons in the fiscal year ended June 30, 1910, to 175,402,396 gallons in the fiscal year 1911, it is probable that the 1911 output of fusel oil also showed a gain. Illinois ranks first in the production of proof spirits and fusel oil, Ohio second, and Louisiana third. In the first two States, alcohol is produced chiefly from grain, while in Louisiana molasses is the sole source.

The imports of fusel oil into the United States amounted to 4,953,952 pounds, valued at \$598,199 during the fiscal year 1910, and 5,231,252 pounds, valued at \$842,916, in 1911. European Russia ranked first as a source of supply, with Germany second, these countries supplying, respectively, 1,342,282 and 1,573,902 pounds in 1911.

It is estimated that the maximum amount of fusel oil obtained in the distillation of proof spirits is about two-tenths of 1 per cent. During the fiscal year 1911, the production of spirits from molasses amounted to 21,634,257 gallons, produced from 41,014,190 gallons of molasses. There were 17 molasses distilleries in operation during that period, 6 in Massachusetts, 3 each in California and Louisiana, and 1 each in Hawaii, Kentucky, Michigan, New York, and South Carolina. Louisiana led in the production of spirits from molasses, followed by Michigan, New York, and South Carolina, in the order named.

POSTAL AND SHIPPING FACILITIES IN PERSIAN GULF.

[From Consul Homer Brett, Maskat, Oman, Arabia.]

The post office at Maskat is maintained by the Government of British India, which finds it expedient to operate post offices at a number of places outside of its own territory, among others at Aden, Arabia; Bagdad and Bassorah, Asiatic Turkey; Bahrein, Bahrein Islands; Bandarabas, Bushire, Jask, Lingah, and Mohammerah, in Persia; and at Guadur, on the Mekran coast of Baluchistan.

A complete and reliable service is provided, some features of which are not familiar to the general American public. One of these is the insurance system, by which any registered letter or parcel may be insured for its value up to 2,000 rupees (\$648.70), the charge being 2 cents for each 50 rupees (\$16.22) or fraction thereof.

Another important service is the Value Payable Post, by which a letter or parcel may be sent and held for delivery until the stated value has been paid to the post office by the addressee. The postal authorities are then responsible for the transmission of this money to the shipper, which is done by a money order.

This system is made to cover freight shipments in the following manner: The seller dispatches the goods to himself at the place of destination; he then indorses the bill of lading, writes an order for the delivery of the merchandise, and sends these documents, in care of the Value Payable Post, to the purchaser. Complete safety is provided for shippers, and persons unknown and without credit ratings are enabled to have orders filled without trouble or delay. The charge for this service is approximately 1 per cent, not including the money-order fee, which must be paid by the consignee.

The post office furnishes certificates of posting for unregistered articles at the rate of one-half cent for any three letters or six packages mailed at the same time by one person.

Parcel-Post Facilities—Bills of Lading with Drafts Handled.

A complete parcel post, both internal and foreign, is operated, packages up to 10 pounds in weight being carried between domestic offices at a rate of 4 cents and those between 10 and 20 pounds at 8 cents per pound. Parcels up to 11 pounds in weight and £16 (\$77.86) in value may be sent to the United States at the regular International Parcel Post rate of 12 cents per pound, but insurance is not available. A semiofficial service carried on in connection with the American Express Co. handles parcels of the same weight, but up to £20 (\$97.33) in value, and insurance is available. This service will also undertake the payment of customs duty in the United States when a proper deposit is made at the time of posting.

The United States has no provision for posting parcels to India. It is surprising that the facilities should be so one sided, because the opportunity to send goods to this part of the world at the 12 cent per pound rate would be of great value to American merchants, as many people here live at places remote from well-stocked stores. An enormous mail-order business is now done with England, and if a proper parcel post were in operation American catalogue houses could participate in this trade. They could probably make large sales of sporting goods, jewelry, and similar lines, and certainly very large sales of shoes. It is impossible to obtain reasonably good footwear in this part of the East, except at extremely high prices.

AN AMERICAN EXPOSITION SHIP.**Important Trade Promotion Plan.**

The American Manufacturers Export Association, of New York, is active sponsor for a plan for an annual commercial tour by representatives of manufacturers and exporters on an exposition vessel, the first cruise to include all Latin-American countries. The United States Marine Exposition Co., a corporation authorized under the laws of the State of New York, has organized the enterprise under the patronage of the association, and Mr. Henry T. Wills, secretary of the association, 200 Fifth Avenue, New York City, will have general management, and Mr. J. J. Finnell, consulting engineer, of New York, exposition management. The active cooperation and interest of the President and the executive departments of State, Navy, and Commerce and Labor have already been secured. Assistant Secretary of State, Mr. Chandler Hale, has issued instructions to diplomatic and consular officers to aid the success of the tour in every way by arousing the interest of Latin-American countries. A representative of the Department of State will probably accompany the expedition.

A ship of 14,000 tons displacement, under American registry, will be secured, and a large amount will be expended in remodeling the boat to fit it for exhibition purposes. Exposition booths and show cases, suitable for the effective display of American manufactures, will be installed. These exhibits will include machinery, plantation equipment, motor boats and cars, factory supplies, hardware, household ware, dry goods, food products, drugs and chemicals, paints, oils, and practically every variety of the up-to-date products of our factories. They will be in charge of high-class representatives of the manufacturers, and every facility for an effective display will be provided—interpreters, advance notices, excursions from inland districts, and the cooperation of governmental agencies. The exposition will be under the personal direction of a distinguished American, well versed in the languages of the countries to be visited, and bearing with him the approval of our own Government.

The name *Exposition* has been chosen for the vessel. It is expected that the first tour will begin about October 1 next, and last about 180 days, the itinerary to begin with Habana and include some 60 ports on the Atlantic and Pacific coasts, ending at San Francisco. Officers of the United States Navy may be detailed to command and navigate the ship, and every effort will be made in the enterprise to emphasize the purpose of the journey to establish the active and effective trade relations with the countries of Latin America, for which Secretary Knox is now paving the way by his visits at Caribbean ports.

This should result not only in establishing better trade relations, but will have other far-reaching effects in relation to banking activities, transportation, and the extension of our foreign commerce. Further publicity will be given to the matter from time to time in the public press before the voyage of the *Exposition* begins.

At the conclusion of the mission to Latin America plans will be undertaken for a similar cruise among the trade centers of the Orient.

British beer consumption decreased from 36,841,000 barrels in 1899 to 33,619,000 barrels in 1911.

AMERICAN NATIONAL CONVENTIONS.

The following are among the prominent conventions to be held during 1912 of national associations pertaining to commerce and manufacturing:

- International Federation of Commercial Travelers' Organization, Colorado Springs, Colo., July 15-17. D. K. Clink, secretary, 143 N. Dearborn Street, Chicago, Ill.
- National Electrical Contractors' Association, Denver, Colo., July 17-20.
- National Hardwood Lumber Association, Chicago, Ill., May or June. Frank F. Fish, secretary, 1012 Rector Building.
- United Commercial Travelers' Association of America, Burlington, Iowa, June 6-8. H. W. Conant, secretary, Sheldon, Iowa.
- American Iron, Steel, and Heavy Hardware Association, Boston, Mass., May.
- E. R. Marnelle, secretary, Thirty-fourth Street and Broadway, New York, N. Y.
- American Institute of Electrical Engineers, Boston, Mass., June 25-28.
- National Association of Credit Men, Boston, Mass., June 18-21. J. H. Tregol, secretary, 41 Park Row, New York, N. Y.
- American Association of Nurserymen, Boston, Mass., June 12-14. John Hall, secretary, 204 Granite Building, Rochester, N. Y.
- American Electrochemical Society, Boston, Mass., April 18-20. Prof. Jos. W. Richard, secretary, Lehigh University, South Bethlehem, Pa.
- National Association of Stove Manufacturers, Detroit, Mich., May 8-11. Thos. J. Hogan, secretary, 1400 Auditorium Building, Chicago, Ill.
- National Retail Hardware Association, Detroit, Mich., June 18-21. M. L. Corey, secretary, Argos, Ind.
- National District Heating Association, Detroit, Mich., June 25-27. D. L. Gaskill, secretary, Greenville, Ohio.
- Railway Industrial Association, Kansas City, Mo., May 14. Guy L. Stewart, secretary, 1328 Pierce Building, St. Louis, Mo.
- United States Highway Association, St. Louis, Mo., April 8. Coleman Du Pont, secretary, Wilmington, Del.
- American Society of Plumbing Inspectors and Sanitary Engineers, St. Louis, Mo., May. M. J. Conroy, president, St. Paul, Minn.
- National Wholesale Grocers of the United States, St. Louis, Mo., May 15-17. G. B. Wason, president, Boston, Mass.
- National Piano Manufacturers' Association of America, Atlantic City, N. J., about May 20. Herbert W. Hill, assistant secretary, 254 West Twenty-third Street, New York, N. Y.
- American Medical Association, Atlantic City, N. J., June 4-7. Dr. Alexander R. Craig, secretary, 535 Dearborn Avenue, Chicago, Ill.
- National Association of Clothiers, Atlantic City, N. J., June 3-5. W. R. Corwine, secretary, 13 Astor Place, New York, N. Y.
- National Machine Tool Builders' Association, Atlantic City, May. Charles E. Hildreth, secretary, Worcester, Mass.
- National Association of Manufacturers, Waldorf-Astoria, New York, N. Y., May 20-22. George S. Boudinot, secretary, 50 Church Street.
- National Cigar Leaf Tobacco Association, New York, N. Y., May 13. Charles Emery Long, secretary, Lancaster, Pa.
- International Waterways Congress, Philadelphia, May 23-28.
- Wholesale Saddlery Association of the United States, Nashville, Tenn., April 23-24. Henry Othmer, secretary, 30 North La Salle Street, Chicago, Ill.
- National Commercial Teachers' Federation, Spokane, Wash., July 15-19. F. M. Van Antwerp, secretary, Louisville, Ky.
- Commercial Law League of America, Colorado Springs, Colo., July 23-25. E. L. Kreamer, secretary, 103 La Salle Street, Chicago, Ill.

British Empire Trade Commission.

The Union of South Africa has appointed as its representative on the British royal commission to investigate the natural resources of the Empire Sir David Graaf, Minister of Public Works. Canada will be represented by Mr. Foster, Minister of Trade and Commerce, and Australia by Dr. Donald Cameron. The commissioners for New Zealand and Newfoundland have not yet been chosen.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8506. Harbor works.**—An American consul reports that a harbor for a certain city in his district now seems assured, as plans, specifications, and other information regarding the project have been prepared for prospective bidders. These call for a basin, a pile wharf, roadway to the shore, etc. It is stated that \$100,000 has so far been appropriated for this purpose, and bids will be received up to April 19. Copy of the specifications, instructions to bidders, etc., which was forwarded by the consul, will be loaned to interested firms by the Bureau of Manufactures.
- No. 8507. Ham, bacon, cheese, canned meats, and food products.**—A business man in a Mediterranean country informs an American consulate that he desires to represent American houses dealing in hams, bacon, cheese, canned fruit, canned meats, and other canned and preserved food products. The inquirer has been manager of a house handling these goods for about nine years and desires to engage in business for himself. Correspondence may be in English.
- No. 8508. Cotton goods for India.**—An American consul in India has forwarded a copy of a letter received from a business man in his district in which it is stated that great quantities of cotton goods are annually imported into that region. The writer of the communication is anxious to secure a part of this trade, and with this object in view is desirous of corresponding with several cotton goods manufacturers in the United States who are seeking export trade. He is anxious to get in touch with the manufacturers themselves, not through export commission agents.
- No. 8509. American articles for Sweden.**—A Swedish importer of American gas lamps and fixtures, who has had considerable success during the past years with these articles, and who has a large number of reliable agents scattered over the country, desires to import various other American products. He informs an American consular officer that he would like small general articles of practical utility.
- No. 8510. Plumbers' supplies and sanitary appliances.**—A Latin-American city has just completed a new water and sewage system, and the city council is now preparing specifications for the proposed contract of connecting the houses with the new system and at the same time embodying prices for the complete installation or furnishing of the necessary plumbing supplies, such as closets, bathtubs, sinks, washstands, pipes, drains, etc. As the city in question has about 40,000 inhabitants such a contract will amount to a considerable sum. As plans are not yet completed, definite information regarding this matter can not be furnished, but a copy of the complete report on this subject, forwarded by an American consular officer, and which contains particulars that would enable American firms to be in a position to take advantage of any opportunity that might arise, will be sent to interested firms on application to the Bureau of Manufactures.
- No. 8511. Shellac.**—A business firm in India has notified an American consular officer that it is manufacturing a superior quality of shellac and is willing to send a sample of the same to any firm in the United States that may be interested in this product.
- No. 8512. Home savings banks.**—One of the commercial agents of the Department of Commerce and Labor reports that a European Government is especially interested in the home savings banks which have proved so successful in England. He writes that this is an important opening, and American manufacturers of this class of goods would do well to get in touch with the European Government officials as soon as possible, submitting samples of their products. A good, low-priced bank for the home for small savings should find a ready sale in the country in question.
- No. 8513. Supplies for shipbuilders and navigation companies.**—A business man informs an American consular officer that he desires to represent in Italy American manufacturers of all kinds of supplies used by shipbuilders and navigation companies. Such supplies would consist largely of locks, port-hole fittings, toilet and bathroom fittings, plumbing supplies, etc. References can be furnished. Correspondence in English or Italian.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 570. Mineral oil for Lighthouse Service.**—Sealed proposals will be received at the office of the Lighthouse Inspector, Tompkinsville, N. Y., until April 15, 1912, for furnishing mineral oil required by the Lighthouse Service for the fiscal year ending June 30, 1913, in accordance with specifications, copies of which, with blank proposal and other information, may be obtained upon application to Lighthouse Inspector, Tompkinsville, N. Y.
- No. 571. Navy Department supplies.**—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until April 16, 1912, for the following supplies. Firms interested therein should make application to the Bureau of Supplies and Accounts, giving the schedule numbers desired: Schedule 4402, typewriter carbon paper, typewriter ribbons. Proposals will be received until April 30, 1912, for the following articles: Schedule 4456, baskets for hydro-centrifugals, cast-iron pinions, rails; schedule 4452, magnesia blocks, plaster asbestos cement, plastic magnesia cement, pipe magnesia covering, asbestos felting, asbestos millboard, asbestos paper, asbestos plaster for pipe covering; schedule 4467, coffee copper boilers, scouse kettles, butchers' knives and cleavers, bake and bread roasting pans, sauce and mess pans, tinware, cooking utensils; schedule 4453, steel bolts, buff paving bricks, gravel, reenforcing steel; schedule 4455, felt-lined rubber boots, Kenwood felt, white rubber gloves and aprons, sodium nitrate; schedule 4464, fire brick; schedule 4466, cotton canvas, flax canvas, flax ravens, cotton ravens; schedule 4460, steel casing, lenses, information confidential lockers, Washington or west coast spruce; schedule 4451, black-print cloth, black-print paper, blue-print paper; schedule 4468, furnishing and installing furnaces; schedule 4448, furnishing and installing forging welding furnace; schedule 4446, laundry machinery; schedule 4459, ventilating and starting panels motors, ventilating sets; schedule 4443, lubricating oils; schedule 4447, mechanical signal hoist ammunition turret outfits; schedule 4458, gap power shear; schedule 4465, insulating cotton tape, rubber insulating tape; schedule 4457, white ash, Douglas common fir, white cabinet oak, Georgia, Virginia, and North Carolina pine, North Carolina pine and clapboards, white pine, spruce, black walnut; schedule 4454, Douglas common fir, fir piles, creosoted fir piles; schedule 4461, forged steel, steel plates; schedule 4462, steel boiler plates; schedule 4453, reenforcing steel. Bids are invited until May 7, 1912, for the following: Schedule 4463, window and door screens; schedule 4444, heavy cotton and wool underwear. Tenders will be received until July 2, 1912, for blue flannel, schedule 4445.
- No. 572. Garbage crematories.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until April 13, 1912, for garbage crematories at the navy yards, Puget Sound, Wash., and Norfolk, Va., and at the naval training station, San Francisco, Cal. Plans and specifications can be obtained on application to the bureau or to the commandants of the navy yards or station named.
- No. 573. Condemned navy material.**—There will be sold at the navy yard, Norfolk, Va., material belonging to the Navy, condemned as unfit for use therein, consisting of furniture, clothing, refrigerators, dishes, nautical instruments, blocks, anchors, hose, wire rope, packing, hardware, valves, whaleboats, cutters, dinghies, bathtubs, electrical supplies, incandescent lamps, generating sets, hawsers, machine tools, scrap metal, etc. Proposals for these materials will be received until April 22, 1912. Schedules containing form of proposals and terms of sale can be obtained upon application to the General Storekeeper, Navy Yard, Norfolk, Va.
- No. 574. Cable.**—Sealed proposals, in duplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until April 12, for cable of various kinds, to be furnished on reels. Further particulars and specifications can be obtained from the Chief Signal Officer. (Proposal No. 578.)
- No. 575. Condemned Navy material.**—There will be sold at the navy yard, Puget Sound, Wash., Navy material unfit for use therein consisting of pumps, boilers, engines, anchors, blocks, scrap rubber, furniture, dishes, packing, hand tools, machine tools, musical instruments, rope, clothing, searchlights, nautical instruments, generating sets, bathtubs, scrap metal, cutters, boats, etc. Further information can be obtained of the General Storekeeper, Navy Yard, Puget Sound, Wash.

GLOVES IN CONSTANTINOPLE.[From the *Revue Commerciale du Levant*.]

Gloves are extensively worn in Constantinople, and the annual consumption is estimated at 80,000 dozen pairs, including both gloves made of textile stuffs and leather gloves. Gloves for women are the most important, and the cheapest kinds are most in demand. Cotton gloves find a large sale at 70 cents to \$2.65 a dozen pairs, white or colored, preferably gray and brown. Next in importance are gloves of Scotch yarn at \$2.35 to \$5.25 a dozen. Silk gloves have a very small sale. The winter being short and not often severe, winter gloves have a smaller sale than summer gloves. Woolen gloves, however, are well liked and are sold at \$2.10 to \$4.75 a dozen, while fur-trimmed gloves realize from \$4.75 to \$7 a dozen.

Military gloves are an important article. These large woolen gloves are sold at \$1.68 to \$2.10 a dozen. Germany has almost a monopoly of cotton and Scotch yarn gloves and supplies them at very low prices, from 72 cents a dozen upward. Austria and Italy also sell a small quantity of these gloves, while France supplies certain good and more expensive articles. Leather gloves are sold to a smaller extent than cotton and woolen gloves, and are supplied by Austria-Hungary, France, and Italy. England furnishes some kinds of gloves of which it has the monopoly, while Germany sends the products of two or three manufactories. The sales of these last two countries are, however, quite small.

The ladies' cheap gloves which are sold have three or four buttons of metal, horn, or composition; men's gloves have one or two buttons or press-studs. Among the cheap qualities, gloves are often imported with a length of only three buttons, but having four buttons, and are sold as four-button gloves. The cheap gloves are mostly glacé kid with a few suède; they are sent from Austria-Hungary at \$3.05 to \$4.85 a dozen. Gloves of medium quality for ladies, with three buttons made of mother-of-pearl, metal, composition, or press-studs, or with four buttons, are sold at \$4.85 to \$7.40 a dozen. Long glacé gloves for ladies, with 8 to 20 buttons, are sold at \$8.40 to \$19.50 a dozen. Suède gloves with three or four buttons of metal or pearl or with press-studs are sold at \$4.50 to \$7.80 a dozen, and long suède gloves with 8 to 20 buttons at \$7.80 to \$17.50 a dozen. The following kinds of men's gloves are sold: Glacé kid gloves with one or two buttons or press-studs, \$5.05 to \$7.80 a dozen; suède gloves with one or two buttons or press-studs, \$4.50 to \$7.80 a dozen. Children's gloves with one to four buttons of various kinds or with press-studs are \$3.30 to \$4.50 a dozen. The gloves of average kind mentioned above are supplied almost wholly by Austria-Hungary and France.

Special gloves comprise kid gloves for men and women, the Derby kind of glove and buckskin gloves for sports and for uniforms. The following are details of these gloves: Kid gloves for ladies at \$6.70 to \$9.75 a dozen, and for men, at \$7.40 to \$9.75, come from France, Austria-Hungary, and Germany; French gloves are generally preferred. White sheepskin uniform gloves, glacé, suède, and buckskin are supplied almost exclusively by two or three German firms. Riding and driving gloves are supplied mostly by the United Kingdom. Austria-Hungary and Germany send the remainder. Fur gloves do not find an important sale, as they have to compete with knitted woolen gloves at very low prices.

MODERN GARAGE IN JAPAN.

[From Consul General Thomas Sammons, Yokohama.]

It may interest American manufacturers of automobiles that an extensively equipped automobile exchange and garage has been opened at No. 7 Bund, Yokohama, Japan. It is claimed that this is the largest establishment of the kind in the Far East, and an assortment of various supplies is kept on hand for the accommodation of the steadily increasing number of automobile owners in this jurisdiction.

The garage is in charge of Karel Jan Hora, of the firm of Letzel & Hora, architects and engineers, who are associated with the British-American importing and exporting firm of Sale & Frazar of Yokohama and Tokyo. E. W. Frazar, of the firm of Sale & Frazar, is largely interested in the importation of American automobiles.

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MARKET FLUCTUATIONS OF SICILIAN ESSENTIAL OILS.

[From Consul Arthur Garrels, Catania, Italy, Feb. 26, 1912.]

It appears that neither crops nor legitimate business conditions warrant the present high price of oil of lemon. This may be attributed to local speculation and market manipulation, made possible by the general prosperity of the industry.

An unusual feature enters into this year's trading. A number of outsiders—that is, persons not regularly engaged in the business—came into the market as speculators by buying and selling "futures." This action had a tendency to stimulate prices, which were later further advanced when the actual producers of oil "squeezed" those speculative "shorts" who could not settle their contracts by the payment of cash differences but were compelled to deliver oil under such of their contracts as had fallen into the hands of legitimate dealers. There is no question but that the general financial prosperity of the producers has tended to strengthen a "bull" movement by placing them in a position to withhold their products from the market.

It is held by some that certain natural conditions in the legitimate trade, while not of such a character as to warrant an excessive price, have nevertheless contributed to the advance over last year. Among instances cited are the generally higher prices of all commodities in the world's markets, the increased cost of local labor, and the covering of legitimate "short" interests among actual producers.

Features Affecting the Market.

The circumstances responsible for the short supplies of producers are supposedly as follows: Many manufacturers buy their lemons under an old conventional method known as a *colpo* (by glance). By this system the product of a whole orchard is bought for a lump sum, the amount paid being based on the producer's judgment as to the possible yield, the "guess" often being made several months before the fruit is ripe. It is maintained that in many instances this season the yield did not, by a fairly large margin, approximate the basis upon which it was bought. This fact, if true, not only increased

the price of the producer's raw material but also found him lacking sufficient fruit to meet the demands of his existing contracts. It is also maintained that the fruit itself, when finally picked, was deficient in oil, this condition being due, it is said, to a protracted period of high winds which occasioned friction among the young fruit on the trees and caused a portion of the oil to evaporate.

Several pertinent features have entered into local lemon-oil production which did not obtain a few years ago. The advent of the Camera Agrumaria (the Government monopoly of citrate of lime) created an ever-ready source of revenue for the producer of citrate of lime (the output of which goes hand in hand with the production of oil) by enabling him to realize, in cash, on the market value of his output immediately upon delivery to the chamber's warehouses. This places the manufacturer in a position to enter the better into any desired market manipulation of oil of lemon.

Effect of Messina Earthquake—Lack of Organization.

The earthquake of Messina in December, 1908, dissolved a common recognized market center for the commodity into a number of scattered market centers. This tended to lessen the possibility of maintaining a more fixed standard of price. Another important, permanent factor which enters into the production of oil of lemon, irrespective of conditions depending directly upon the crop, and which affects the quality of oil produced, is the price and demand abroad for fresh lemons. When the export demand is good and is coupled with high prices, a larger amount of fruit is diverted into foreign channels than when export conditions are not so favorable.

In a consideration of any features incident to the production of Sicilian lemons and their by-products, it is well to bear in mind the complexity of the basic principles underlying these industries. While there are apparently five or six well-defined phases of the industry (growing the lemons, manufacturing by-products, jobbing and exporting such by-products, preparing and exporting fresh fruit and peels in brine), the business is not organized along definite lines. A grower, for instance, may be only a grower or he may be engaged in one or all of the other lines; a manufacturer of by-products may also be an exporter of fresh fruit, etc. This condition naturally creates a diversity of bases of costs and thus precludes the possibility of any general, definite ratio between cost and selling price. When there is added to this the facts that the underlying basic unit of value—the cost of producing a crop of lemons—is always an unknown quantity, that the business in none of its producing phases proceeds along generally recognized scientific economic lines, that contracts for future delivery must always be of a highly speculative nature, it will readily be understood how difficult it is sometimes to arrive at even an acceptable, plausible explanation of abnormal prices and trade conditions.

Essence of Bergamot.

The conditions governing the production of oil of bergamot are simpler than those pertaining to oil of lemon. The district in which the bergamot is cultivated is exceedingly limited; the persons engaged in the industry are comparatively few in number and have an almost exclusive monopoly of that essence. The world's demand for

this article is steadily increasing, while the normal available supply has decreased some 40 per cent during the last three years. When, in addition to these permanent causes for high prices, there are added crop curtailments coupled with the independent position of the producers, unprecedented high prices are easily accounted for.

The decline in the normal production is attributed to the facts that the earthquake of December, 1908, destroyed groves and that there is now less adulteration than formerly. Another important factor that tends to a steadily decreasing supply is that all of the bergamot trees are very old and that no young trees have been planted for many years. High winds, just at picking time this season, stripped the trees of fruit. The factories' capacity is inadequate to dispose immediately of any large quantity of fruit, and a great deal becomes unfit for manufacture through decay. The producers of oil of bergamot have received good prices during the last few years and are consequently in a position to withhold their oil and dispose of it at will. It is stated that a movement to cultivate the bergamot in Messina Province has begun by grafting bitter orange trees with scions of the bergamot. It will, however, be several years before any fruit of a commercial value can result.

[Additional information relative to the speculative movement referred to in the foregoing report may be obtained by interested firms from the Bureau of Manufactures. Among numerous previous articles appearing in Daily Consular and Trade Reports, the following are particularly pertinent: Citrate of lime industry, Nov. 2, 1908, and Feb. 19, 1910; essential oil, Jan. 23 and Mar. 20, 1909; lemon growing in Sicily, May 20, 1911.]

JAPANESE EFFORTS IN MANCHURIA.

[Notes prepared by American consulate, Dalny, from China Tribune.]

The Japanese Government of the Kwantung leased territory is striving to develop various industries, for which \$125,000 is devoted. With the object of making Dalny not only the first-rate trading port in Manchuria, but also a port of transshipment for Korean ports, as well as Tientsin and other North China ports, an annual subsidy of \$35,000 has been granted to certain local shipping firms engaged in coasting trade. The four steamers receiving such subsidy will soon be increased to five or six.

An annual grant of \$5,000 is made to the Fishery Association and the Marine Products Co. (Ltd.). A special subsidy may also be granted for the export of marine products to South China.

To open a market for Kwantung salt in Korea a \$10,000 subsidy was granted. The Government is working hard to promote the sale of salt.

Willow planting is being encouraged. Wicker trunks are now popular, being used both by Chinese and foreigners, so there is good prospect for the manufacture of willow articles. The Government is also distributing free seeds and fruit trees to both native and Japanese farmers. Grape culture is promising, and a subsidy of \$5,000 for wine making has been allowed.

Glass factories have started at Dalny and Port Arthur. A subsidy is given the industry, which appears promising.

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.

COST OF LIVING ABROAD.

GERMANY.

[From Consul Talbot J. Albert, Brunswick.]

Higher Prices of Foodstuffs.

The increased cost of living due to the higher prices of foodstuffs is the cause of much complaint in Germany. The advances shown by the most important articles of food during the past year are shown by the following table of wholesale prices:

Articles.	February, 1911.	February, 1912.	Articles.	February, 1911.	February, 1912.
Wheat bushels ¹ ..	\$1.26	\$1.38	Sugar..... pound..	\$0.0199	\$0.0332
Rye..... do.....	.97	1.28	Table beans..... do.....	.0324	.0432
Oats..... do.....	1.12	1.39	Lentils..... do.....	.0216	.0432
Corn..... do.....	.88	1.21	Potatoes..... 100 pounds..	.54	1.188
Barley (cat/le feed). do.....	.92	1.20	Beef..... pound..	.1728	.1728
Peas..... pound..	.17	.21	Beef (belly piece)..... do.....	.1296	.1404
Rye flour..... do.....	.0203	.0248	Pork..... do.....	.1404	.1404
Wheat flour..... do.....	.0259	.0273	Veal..... do.....	.1296	.1512
Wheat bran..... do.....	.0103	.0155	Mutton..... do.....	.1404	.1404
Rye bran..... do.....	.0103	.0155	Butter..... do.....	.2376	.2808
Straw..... 100 pounds..	.486	.605	Eggs..... dozen..	.30	.36
Hay..... do.....	.5076	.8856	Lard..... pound..	.1129	.1021
Coffee..... pound..	.1183	.1415			

¹ 60 pounds.

The only article in the above table showing a decrease is lard, the lower price of which was due to the scarcity of fodder, which forced the farmers to slaughter a large number of hogs and throw the product on the market. The scarcity of feed also forced the sale of a large number of cattle, which accounted for the small increases in meat prices. How high these prices will go when this surplus is sold is hard to predict. Increased consumption was responsible for the higher price of rye, and short crops for the increased cost of grain, fodder, vegetables, and sugar, the last article being dependent on the sugar-beet crop. The dearness of grain and fodder caused rises in the prices of flour and butter.

It is difficult to give a general average of retail prices, owing to the differences in quality of goods, store rents, and other circumstances, but the tendency is unmistakably toward higher prices. While the price of bread has remained the same, the loaves have been made smaller. The people especially affected here are the laborers and small officials, who must practice economy in all directions. The following table gives a comparison of retail prices per pound of principal articles of consumption:

Articles.	February, 1911.	February, 1912.	Articles.	February, 1911.	February, 1912.
Butter.....	\$0.30	\$0.35	Rye flour.....	\$0.039	\$0.048
Potato flour.....	.032	.043	Sugar.....	.054	.071
Eggs (per dozen).....	.23	.29	Beans.....	.05	.054
Peas.....	.043	.054	Lentils.....	.066	.086

AUSTRALIA.

[From report of the Bureau of Census and Statistics of the Australian Commonwealth, forwarded by Consul-General John P. Bray, Sydney.]

A special inquiry into the cost of living in Australia was undertaken by the Bureau of Census and Statistics of the Commonwealth of Australia, covering the period from July 1, 1910, to June 30, 1911. Small account books were distributed among house-

holders throughout the Commonwealth, with provision for entering, for each week of the period covered, particulars of income and expenditure under specified headings. While approximately 1,500 books were distributed, only 222 were returned at the end of the period, of which 212 were available as a basis for compilation. The distribution of the books was not in any way restricted, and they were kept by people of all classes. Of those returned, 58 were kept by families having over 4 members and incomes of over \$1,000 a year, 41 by families of 4 members or less and incomes of over \$1,000, 49 by families of over 4 members and incomes of \$1,000 or less, and 64 by families of 4 members or less and incomes of \$1,000 or less.

The average weekly expenditures of the four above-mentioned classes were as follows, in the order named: \$27.34, \$24.92, \$21.53, \$12.91. The following table gives an analysis of this average weekly expenditure by percentages under the most important divisions:

Income.	Number in family.	Housing.	Food.	Clothing.	Fuel and light.	All other items.
		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Over \$1,000.....	Over 4.....	11.84	28.39	13.11	2.95	43.71
	4 and under....	13.83	22.00	12.16	3.58	48.43
\$1,000 and under.....	Over 4.....	14.48	40.12	13.22	4.26	27.92
	4 and under....	16.41	31.41	12.25	3.77	36.16

While direct comparison of the results of the Australian inquiry with those obtained in other countries is practically impossible, owing to differences in the methods followed and classes of people included, a general comparison of the percentages expended under the different heads in Australia, the United States, and Germany is shown in the table following. In preparing this table, family groups with incomes approximately the same as those included in the Australian inquiry have been selected from the returns of the investigation in the United States in 1902 and the German investigation of 1907.

Countries.	Housing.	Food.	Fuel and light.	Clothing.	Other expenditures.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Australia.....	13.70	29.30	3.46	12.72	40.82
United States.....	17.40	36.45	5.03	15.72	25.40
Germany.....	14.90	30.31	3.12	14.91	36.76

CEMENT GUN WORK AT PANAMA.

[Announcement of Isthmian Canal Commission, supplementing article in Daily Consular and Trade Reports for Sept. 8, 1911, on "Use of Cement Gun by the Government."]

The coating of cement mortar applied by the pneumatic cement gun which was sent to the Isthmus a little less than a year ago for use in spraying the surface of certain rock faces in Culebra Cut, which disintegrated on exposure to air, was found not to prevent this disintegration. The concrete mixture sprayed on the smooth surfaces adhered uniformly, but was not sufficiently air-tight to retard appreciably the progress of disintegration. The gun was used recently on the relocated line of the Panama Railroad, in coating the surfaces of hand-laid revetment wall, made of hard Bas Obispo rock. In this case the concrete penetrated the interstices between the rocks as far as several feet and thus obtained a firm hold. Using a mixture of 1 part of cement to 3 of sand for the inner coating and 1 part of cement to 2 of sand for the final surfaces it was practicable to lay a smooth, strong coat from 2 to 3 inches thick over an area of about 25 feet square a day. The spraying was continuous. By the time the work had been carried from one end of the area under treatment to the other the first part was ready for another coat. In all, about 10,000 square feet of revetment was treated.

The Irbit fair.—A Reuter dispatch states, under date of March 14, that \$3,893,000 worth of furs have been sold at the Irbit (Russia) fair this year, an increase of nearly \$250,000 over 1911, squirrel skins forming \$1,640,700 and sables \$527,000 of this total.

CUBAN AGRICULTURAL FAIRS.

The March number of the Cuba Magazine reviews the exposition and fairs held in that Republic during the first two months of the current year, notice of which appeared in Daily Consular and Trade Reports on January 5. These included the Third Annual Cubitas Valley Fair at La Gloria, January 24 to 26; the Second Cuban National Exposition, Habana, January 28 to February 24; the First Camaguey-Oriente Fair, Camaguey, February 3 to 12; and the Third Annual Isle of Pines Fair, held at Santa Fe under the auspices of the Commercial Club, February 13 to 16. The following items pertaining to these fairs have been taken from the publication mentioned:

At the Cubitas Valley Fair the displays of fruit were confined largely to those varieties which are proving commercially desirable. Mr. Carl A. Ward, of Boston, in his entry of nursery stock exhibited Ceylon honey jac-fruit, kola nut, Circassian bean tree, Australian silky oak, Indian fig cactus, cocoa plum, nutmeg, *Prunus sclerocarpa*, loquat, cluster fig (*Ficus glomerata*), Surinam cherry, mangosteen (*Garcinia mangostana*), cherimoyer (*Anona cherimolia*), yellow Chinese guava, Talipot palm, genip, seedless breadfruit, *Coccoloba scandens*, Liberian coffee, sour sop, *Laurus nobilis*, sausage fruit, rooster vine, grafted Trapp avocados, inarched mango, thornless cactus, candle nut or Otaheite walnut, and turpentine wood (*Syncarpia laurifolia*). Other displays included honey and wax, hand-made mahogany furniture, and a department of women's work.

Second Cuban National Exposition.

The Second Cuban National Exposition was preeminently an agricultural and horticultural fair, the principal exhibitors being Americans and Canadians. The exhibit of Las Mercedes plantation included over 40 varieties of citrus fruit, from native seedlings and the shaddock, through all the commercial varieties, to unusual cross-breeds like the Buckeye navel (ribbed like a gooseberry) and the golden nugget orange, both from imported stock. There was also a cross between the ruby blood orange and the grapefruit, which is a blood grapefruit. Other exhibits included grapefruit, mandarins, limes, pineapples, lemons, citron, bananas, and native fruits, such as anonas, guanábanas, and guayabos; commercial vegetables, such as tomatoes, peppers, eggplant, squash, with the common garden vegetables, turnips, rutabagas, carrots, radishes, chard, chayotes, cabbage, cauliflower, beans, cowpeas, kohlrabi, lettuce, spinach, potatoes, granadilla, and the native malanga, ñame, yuca, etc.; also peanuts, rice, and Kaffir and broom corn. The exhibit of orange boxes, tangerine straps, and pineapple crates made from almagico wood showed that this wood makes a very light, strong, and attractive package of white color. There is an abundance of almagico in eastern Cuba.

The exposition grounds were visited by tourists in large numbers, and the Cuban National Horticultural Society held its sixth annual meeting there February 14-16. Mr. J. E. Roberts, of Bartle, was elected president of the society. Additional features were the athletic and sporting contests. It is said that an effort is being made to "try out" Cuban athletes and discover the champions in preparation for Olympic games to be held if an international exposition is arranged for Habana at the time the Panama Canal is opened.

[An account of the Cuban National Exposition of 1911, by Consul General James L. Rodgers, appeared in Daily Consular and Trade Reports on Mar. 7, 1911.]

Camaguey-Oriente Fair—Railway Industrial Department.

The Camaguey-Oriente Fair was advertised as a provincial exposition on behalf of central and eastern Cuba, but welcomed exhibits from other sections of the island. A notable display was made by Mr. Thomas R. Towns, who won 21 prizes and was officially recognized as "a good friend of the country," being the first American to receive this honor. Included in his exhibit was the Towns grapefruit. Other displays were made of standard varieties of grapefruit, navels, tangerines, mandarins, satsumas, etc., and the exhibit of La Gloria Exposition Association was supplemented by entries of cigars, tobacco, silkworms and silk, native root crops, potatoes, fine vegetables, peanuts, bananas, coconuts, jellies, wines, vinegars, and women's handiwork.

The display of the Cuba Railroad's industrial department will probably be the last made by the company, as it is understood this department is to be discontinued. Methods of growing alfalfa were shown by the railway, and the product displayed in

various forms. There were several eucalyptus trees 18 months old from seed that were 10 feet tall and 3 inches in diameter. Native medicinal plants were shown, and in boxes diminutive fields of buckwheat, peanuts, and other crops. Useful by-products of the manufacture of starch and vegetables were exhibited. The department's demonstration farm sent in fine vegetables, and on several evenings small packages of seed were given away.

New Horticultural Society—Isle of Pines Fair.

During the fair at Camaguey a new horticultural society was organized which took the name of the Cuba Horticultural Society, though its organizers explain that its object is to solve the special problems of colonies in the central and eastern sections of the Republic. Mr. D. W. Hart, of La Gloria, is president of the new association.

Though this was not the season for pineapples, a noteworthy feature of the Isle of Pines fair was the display of Smooth Cayennes. So popular is this fruit that many hundreds of acres are already set out, and all the Smooth Cayenne slips in sight are contracted for in advance, a single company recently ordering 200,000. Another notable display at this fair was of heavy furniture made from native hardwoods. The schools of Columbia, Los Indios, and Santa Fe made instructive exhibits.

BIG TREES OF NEW SOUTH WALES.

[From Consul General John P. Bray, Sydney, Australia.]

Much interest is being manifested here in the preservation of Australian forests. The big trees of this State are being steadily destroyed, and those immediately concerned are looking with apprehension on the prospect. A writer in a local newspaper says that there may be an occasional stringybark 300 feet in height, but that these giants will soon be a thing of the past.

No provision is being made for replanting these trees and the lumbermen fell those already growing before they reach half that height. Even one moderately tall tree, the 150-foot red cedar, is nearly extinct. Such trees frequently yielded 30,000 superficial feet of timber per tree. The timber trees of New Zealand are still numerous, but the best are being picked out. The *Eucalyptus calyr*, popularly known as the Cumberland blue gum or Clarence flooded gum, is one of the most useful trees in this State. It rarely attains a greater height than 80 feet, with a diameter of 7 feet, but it frequently yields 6,000 to 7,000 feet of timber. It is used for all kinds of building purposes, as well as for coach building. The next best tree for building purposes is the stringybark (*Eucalyptus capitellata*), which sometimes attains a height of 400 feet, and thus stands out as the tallest tree in the world. The tallest American redwood recorded was 340 feet.

[A list of the trees of New South Wales which attain a height of 100 feet and over, with their commercial uses, may be obtained from the Bureau of Manufactures.]

OXYGEN MAKING IN ENGLAND.

[By Consul H. L. Washington, Liverpool.]

New works are being erected for the manufacture of oxygen at Bromborough Port, 3 miles above Liverpool, on the opposite shore of the Mersey River, and they are expected to be in operation by October of the present year.

The plant is designed to produce 200,000,000 cubic feet of oxygen and hydrogen a year. Two gas engines, each of 1,750 horsepower, direct-coupled to continuous-current generators, with Mond gas and recovery plant, will, states the engineering supplement of the Times, furnish the power.

It is expected that oxygen will be sold as low as \$1.21 per 1,000 cubic feet direct from holders and \$4.86 in cylinders, and that the purity will be increased to 99½ per cent.

[Another article on the manufacture of oxygen in Great Britain appeared in the Daily Consular and Trade Reports for Nov. 27, 1911.]

NORWEGIAN HERRING FLOUR AND OIL INDUSTRY.

[From Consul P. Emerson Taylor, Stavanger.]

There is increasing interest in manufacturing herring flour and herring oil, not only within this district, but in the northern part of the Kingdom.

The herring flour and oil factories in the district are all doing a prosperous business and increasing their output each year to meet a demand that has thus far been much beyond their capacity. While the manufacture of herring flour and herring oil is profitable in the district, it is believed by those best informed that it can be made a much more profitable industry in the extreme northern part of Norway.

Extensive Uses for the Oil and Meal.

Herring oil is being used more and more instead of linseed oil for paints, and the foreign demand for it is steadily increasing and is far beyond the supply. Herring flour and meal are used in Norway chiefly for cattle feed, while that exported to Germany is used as feed for both cattle and hogs. That which is exported to the United States, it is believed, is all used as fertilizer. Considerable quantities of the herring flour are also exported from this district to France, England, and Japan.

The herring flour is manufactured from the fish after the oil has been extracted and pressed out, so that the cost of the raw material is very low. Two new herring-flour factories are being completed at Haugesund, in this district, which is a large shipping port for kippered herring and all herring in oil or tomato.

The great advantage and economy in establishing herring flour and oil factories near the fishing waters are due to several conditions. Herring are caught during only a few months of the year, and during these months there is often a surplus quantity which the canning factories can not use. The export market for fresh herring at such times is also overstocked, and large quantities of the fish can not be sold after being transported to southern Norway and even to England and Germany. The establishment of herring flour and oil factories in the northern fjords where the fish are caught would effect a great economy in saving the transportation charges, as well as utilizing the surplus product.

Ample Power—Norwegian Viewpoint.

Then the presence of cheap and almost unlimited water power in the immediate vicinity of the herring fishing waters is another important consideration in the establishing of herring flour and oil factories in the northern fjords rather than in the cities where power transmitted long distances is much more expensive.

One of the men interested in the establishment of these herring flour and oil factories is quoted by the Christiania Intelligensen, of that city, as follows:

A number of requests have come to me to work for the establishment of herring flour and oil factories in Finmarken. There are a hundred small fjords in Finmarken and northern Norway with good port and steamship landings and facilities, good herring fishing waters, and business men interested in the fishing industry. Many of these places seem to have been made for the woolen industry and the fish-canning factory, but more especially still for herring-flour factories. There are waterfalls at almost every man's door, and the finest herring fishing waters in the fjords with much greater quantities of herring than can be used at present.

There are already quite a few small herring-flour factories established, but even if there were 30 or 40 times as many as at present there would be no overproduction of herring flour. Conditions here in southern Norway and in some parts of northern Norway are such that herring flour can hardly be obtained at any price. It has been practically all exported to other countries at steadily advancing prices.

A small herring-flour factory will use about 100 maal (150 liters each) of herring per day, and from this will manufacture about 30 sacks (220 pounds each) of flour, and 7 barrels (396 pounds each) of oil. Of course the herring flour can only be made during the herring season and while the herring lasts. The eastern, southern, and northern parts of Norway should combine and build herring-flour factories in northern Norway. In this way they could supply the strong demand for herring flour. My experience is that herring flour is the most nourishing stock food there is. The herring market could then be better regulated. It now often happens that Norwegian herring when parr are returned from Germany unsold. And the exports of fresh Norwegian herring to England are often so large and the market so overstocked that large quantities of the fish are simply thrown overboard into the sea. The establishment of more herring factories for the manufacture of flour and oil would prevent such conditions.

Output and Prices.

There are three herring flour and oil factories in Stavanger, and two in Haugesund. The largest factory in this city last year reports a production of a little more than 20,000 sacks (220 pounds each) of herring flour and about 5,000 barrels (396 pounds each) of herring oil. The three factories in this city have a combined output of about 40,000 sacks (220 pounds each) of herring flour, and about 10,000 barrels (396 pounds each) of herring oil, per year. The two Haugesund factories have an annual output of from 18,000 to 20,000 sacks of herring flour and from 4,000 to 5,000 barrels of herring oil per year.

The Vestlandske herring flour sells in this district for 15 crowns, (\$4.02) per sack of 220 pounds, and the Nordlandske herring flour, considered slightly better in quality, sells for 16 crowns (\$4.28) per sack of 220 pounds. Herring oil sells for 0.27 crown (\$0.073) per kilo (2.2 pounds).

ROLLING STOCK FOR ITALIAN RAILWAYS.

[From Consul L. J. Keena, Florence.]

The Italian Government railroads are divided into 10 compartments or geographical divisions. The car equipment is not divided or allotted according to compartments, and cars are moved up and down throughout the Kingdom without having a fixed base. The car equipment of the Italian railroads is estimated at 170,000 cars operating on all lines and including both freight and passenger services. The purchasing headquarters for this district is the office of the Capo Ufficio, Trazione & Materiale Rotabile, Porta al Prato, Florence. Correspondence with that office must be in Italian.

Several years ago a law was enacted which in substance states that, as a local industry is concerned, two-thirds of the railroad cars used on the Italian railways must be of Italian manufacture and the remaining one-third might be imported. The countries at present supplying such materials are Germany (Krupp factories), Austria, England, and the United States. There is no prejudice against American-made cars, either freight or passenger, though I understand that the rolling stock principally bought in the United States is locomotives. Foreign purchasers of rolling stock are ordinarily made from the manufacturer offering the best prices in response to the request for bids. The building of several new railroads in Italy has been announced in recent issues of Daily Consular and Trade Reports.

FORMOSAN BUSINESS NOTES.

[From Consul Samuel C. Reat, Tamsui.]

Rubber, Cotton, and Camphor Growing Enterprises.

About 20 Japanese business men have organized the Taiwan Norin Kabushika Kaisha, capital \$250,000, to raise rubber on 3,600 acres given it by the Formosan Government. The company will also grow bananas, pineapples, and sugar cane for profit until the rubber trees are tapable. Many people appear anxious to raise rubber in Formosa, and seeds from the Malayan Islands have been distributed for experimental growth.

Although Government cotton-growing experiments in Formosa have not been encouraging, the Taiwan Menka Saibai Kumiai (Formosa Cotton Cultivation Association) has been organized to raise cotton experimentally in the central and southern parts of the island.

Camphor-tree afforestation is carefully nurtured by the Government, which in March distributed 3,855,552 young trees for this year's plantings.

Sugar Mills to be Enlarged—Industrial School.

The Taiwan Seito Kaisha, which has absorbed the Formosa Sugar & Development Co. and the Iki Seito Kaisha, will improve and enlarge the equipment of these new properties. The absorption of the Formosa Sugar & Development Co. removed the last foreign (British) company engaged in the manufacture of sugar. The Taiwan Seito Kaisha is one of the strongest and largest companies in Formosa. It owns six mills, all manufactured in the United States (Honolulu Iron Works).

With an appropriation of \$75,000 the construction of a technical and industrial school in Formosa has begun in the prefecture of Taihoku at Dainan-sho. The school is intended for the natives (Chinese), and the course will cover three years; graduates will be employed in the railway and public works' departments.

Gas Lighting—New Steamship Line.

The Taiwan (Formosa) Gas Co. has obtained a 28-year franchise in the city of Tainan, and intends to begin operations about the time the Government commences constructing waterworks in that city. The bill for the waterworks is now before the Imperial Diet. Tainan is the second city in the island and was the capital during the Chinese régime.

Yo Sam Pa, one of the wealthy Chinese residents of Daitotei, has about succeeded in organizing a small steamship company with \$500,000 capital. He now owns the *Chozan Maru* and will add three larger ships. The service will be bimonthly from Tamsui to Foochow, Hongkong, Singapore, and Batavia.

Graphite Resources of Southern China.

According to Consul Julian H. Arnold there is said to be much graphite in the vicinity of Amoy, and it is anticipated, when mining operations are commenced in that section of China, that the region will be able to supply a considerable quantity of graphite. Of just what quality or grade it will be the consul can not say at the present time.

NOTES FROM INDIA.

[From Consul General William H. Michael, Calcutta.]

Victoria Memorial—Tobacco Experiments.

Excellent progress is being made on the Victoria Memorial in Calcutta. Finished marble of excellent quality is arriving steadily. The financial position, owing to the accumulations of interest on invested funds, is most satisfactory; in fact, the funds are better by about \$33,000 than they were when the scheme was first started.

One of the most marked successes of the Agricultural Department has been its recent tobacco experiments, both in culture and in manufacture, which have given noteworthy results. The prices realized for the first year's crop, \$20 for Sumatra variety, have been quite eclipsed by last year's results, viz, \$40 per maund (82½ pounds) for the same variety. The crop was some 1,476 pounds per acre and the cost of production was low, leaving a substantial profit on cultivation and curing.

Irrigating Canals.

One result of the re-partition of Bengal will be to leave the new Presidency of Bengal with two large irrigation canals which do not pay. These are the Midnapore and the Hijili tidal canals. According to the canal revenue report for the triennial period ended March 31, 1911, the capital outlay on the Midnapore Canal was \$2,832,326, the average annual receipts for three years were \$64,783, and the average annual expenditure \$72,270; the Hijili Canal cost \$871,439, the annual maintenance charge was \$20,350, and the receipts \$18,350. The Sone and the Orissa Canals, which go to the new Province, are productive works in the true sense of the term, as they yielded an average annual profit of \$583,320 during the last three years.

[From Consul M. K. Moorhead, Rangoon.]

What Burma Buys from the United States.

The manifest of the steamship *Tennasserim* (Henderson Line) from Liverpool, dated February 16, 1912, shows that the following goods were shipped at New York for Rangoon: 17,632 kegs wire nails; 409 bundles corrugated iron sheets; 650 reels barbed wire; 2 crates wire fencing; 36 rolls concrete reinforcements; 17 boxes scales; 24 pieces band iron; 6 cases pumping machine y; 3 cases machinery; 58 cases tools and hardware; 12 cases steel wheelbarrows; 30 cases electric appliances; 10 cases typewriters; 34 cases canned provisions; 100 cases condensed milk; 10 cases toilet paper; 1 case clocks; 1 case saddlery; 1 case tennis-racquet gut; 1 case pills; 1 case dental cream.

ASPHALT AND PETROLEUM IN SOUTH AFRICA.

[From Consul Nathaniel B. Stewart, Durban, Natal.]

From the data gathered in response to an American inquiry concerning asphalt and petroleum deposits in the Mosbeshford district, it appears that there are no petroleum wells or asphalt mines being operated there or at any other point in this part of Africa. It is understood that there are signs of such deposits on a farm in the Orange River Colony. Some years ago an Austrian expert stated that from the indications there he felt certain that there was a diko in the vicinity, possibly at a depth of 2,000 or 3,000 feet.

FOREIGN TARIFFS.**AUSTRALIA.**

[Documents transmitted by Consul General John P. Bray, Sydney.]

Duty on Parts of Articles.

In a customs ordinance published in the Commonwealth of Australia Gazette, of January 20, 1912, rules are laid down for the customs treatment of parts of goods dutiable ad valorem or free from duty. It is directed that, except where otherwise expressly provided by the tariff, any part of any goods which are dutiable ad valorem or are exempt from duty shall, though imported separately, be dealt with under the tariff item applicable to the complete goods. However, if any such part is usable on more than one article, the part shall be dutiable under the tariff item applicable to the higher or the highest rated article with which it is commercially usable.

BRITISH INDIA.

[From Consul Maxwell K. Moorhead, Rangoon.]

Customs Requirements for Watermarked Paper.

The customs requirements for the marking of watermarked paper imported into British India, in order adequately to observe the rules of the Indian merchandise marks act, have again been changed. The rule to apply on and after July 1, 1912, is that any imported paper bearing a watermark in the English language shall have a counter indication of the place of manufacture, in the English language, on each sheet, if the paper be of other than British manufacture. This reverts to the requirements formerly in effect. (See Foreign Tariff Notes, No. 1, p. 27.) In accordance with a circular of instructions issued by the Government in August, 1911, the requirement that each piece of paper bear the counter indication of origin was relaxed, and it was held sufficient that the country of origin should be indicated on each package containing such paper. (See Foreign Tariff Notes, No. 5, p. 149.)

American paper manufacturers should see that the watermarks contain the words "Made in U. S. A.," else the importation of such paper into British India will be prohibited.

CANADA.**Marking of Imported Goods.**

A Canadian customs memorandum of February 12, 1912, calls attention to the requirements to be observed in the marking of goods to be imported into Canada. When goods are not of Canadian or British manufacture, it is required that the marking of such goods shall not be in a form tending to mislead a purchaser into believing that the goods are of Canadian or British manufacture.

Schedule C of the Canadian customs tariff specifies the articles of which the importation into Canada is prohibited, and all goods prohibited under that schedule of the tariff are subject to seizure and forfeiture when imported into Canada. Item 1209 in this schedule bears on the marking of goods imported from abroad and runs as follows:

Any goods manufactured in any foreign state or country which bear any name or trade-mark which is or purports to be the name or trade-mark of any manufacturer in

the United Kingdom, or in Canada, or in any other British country, unless such name or trade-mark is accompanied by a definite indication of the foreign state or country in which the goods were made or produced;

Provided that for the purposes of this item if there is on any goods a name which is identical with or a colorable imitation of the name of a place in the United Kingdom, or in Canada, or in any other British country, such name, unless it is accompanied by the name of the State or country in which it is situate, shall, unless the minister decides that the attaching of such name is not calculated to deceive (of which matter the minister shall be a sole judge), be treated as if it was the name of a place in the United Kingdom or in Canada or in any other British country.

The department of customs gives the following example of merchandise of which the importation would be prohibited under this clause: Shingles from the United States marked "XXX-B. C. Clears—Vancouver, B. C.," being calculated to deceive as to their origin or class, are prohibited.

FRANCE.

[Reported by Consular Assistant Bartley F. Yost, Paris.]

Customs Regulations for Fresh Meat.

By a presidential decree of February 6, 1912, the regulations governing the admission into France of fresh meats are changed as follows:

Importation in separate pieces may take place, in the case of the kinds of meat of bovine cattle named below: Tenderloins and sirloins; rounds and rumps, which shall bear no signs of having been trimmed (they may be presented either separately or attached to each other); tongues which shall bear no signs of having been trimmed, and which shall be presented with the pharyngeal walls, the retropharyngeal and the sublingual ganglions adhering naturally, as well as the larynx, and about a third part of the trachea; kidneys and brains; and sweetbreads. Importation may be allowed, in the case of meat of sheep and hogs, for kidneys and brains.

This decree is a relaxation of the regulations formerly in effect, under the decree of May 26, 1888, which restricted importation in separate pieces to sirloins and tenderloins.

[From Consul General A. Gaulin, Marseille.]

Plant Regulations.

The United States consular agent at Toulon, France, reports that, in order to protect the silk industry in that part of France, the Government has forbidden the importation of all living ligneous plants. It was thought that the mulberry tree, which is so necessary to the silk industry, was in danger of a pest known as "diapsis pentagon," which is said to prevail in neighboring countries.

The consular agent observes that since the chief plant product exported to the United States from the vicinity of Toulon consists of flowering bulbs, it is not likely that any hitherto unreported plant malady could have been brought to America.

PORTUGAL.

[From *Diário do Governo*, Feb. 7, 1912.]

Duty on Aeroplanes.

The Portuguese Government has ordered that aeroplanes be included in the customs tariff, subject to the import duty of 40 milreis (milreis = \$1) each, when imported complete.

RUSSIA.[From *Vyestnik Finansov*, Feb. 18, 1912.]**Changes in Tariff and Customs Act.**

The following provisions affecting the customs tariff and customs act of Russia are embodied in the law promulgated in the *Vyestnik Finansov* of February 18, 1912:

The free importation of the following articles is continued until the end of the year 1917: Fish, the produce of Russian fisheries, in tin boxes, imported through the Archangel customhouse, provided that the boxes in question shall have had customs stamps affixed to them; beech staves, imported through Baltic seaports and over the western land frontiers; caterpillar lime, for trees (a preparation composed of resin and lime); Stassfurt salts in the natural state, in powder or not; chloride of potassium; sulphate of potassium; Chile saltpeter (nitrate of soda); chemical preparations for combating the diseases of the vine and fruit trees, as specified in a list drawn up by the ministry of finance; and cans and can keys for packing fish imported through the Archangel customhouse.

The note to section 476 of the customs act is modified so as to allow the free reimportation, until the end of the year 1917, and with the authorization of the Ministers of Commerce and Industry and of Finance, (1) of packing material from foreign countries and Finland, used for the exportation of goods, except bags, which may be reimported free of duty only to the extent of 75 per cent of those exported (bags used for the exportation of bran are not allowed to be reimported free of duty); and (2) of receptacles intended for the transportation of special products of foreign or Finnish origin on which duty was paid upon their first importation into Russia. The Minister of Commerce and Industry, in conjunction with the Minister of Finance, is authorized to limit or entirely abolish the above concessions if they should lead to abuses.

The same law provides also for the continuance until the end of the year 1917 of the drawback allowance on the tin plate exported in the form of receptacles for Russian petroleum products, as well as on the strips and scraps of tin plate remaining over from the manufacture of such receptacles. The free importation of tin plate for the manufacture of receptacles for the exportation of Russian petroleum products, provided for by section 507 of the customs act, is extended, until the end of the year 1917, to tin plate imported by Baku kerosene works for the manufacture of receptacles for the exportation of kerosene to Persia.

Imposition of duty on Bisulphide of Carbon.

Bisulphide of carbon, now admitted free of duty, is to be dutiable after April 14, 1912, at 1.50 rubles per pood (\$2.14 per 100 pounds).

TURKEY.

[From American Ambassador W. W. Rockhill, Constantinople.]

Articles not Considered Contraband.

The Imperial Ministry for Foreign Affairs in Turkey has communicated to the embassy of the United States in Constantinople notice that the following articles are not regarded as contraband of war: Combustibles, food, and telegraphic apparatus.

UNITED KINGDOM.

[Transmitted by Consul Albert Halsted, Birmingham.]

Proposed Change in Merchandise-Marks Requirements.

The London correspondent of the Birmingham Daily Post has telegraphed the following:

The bill to amend the law as to trade-marks and trade descriptions introduced by Mr. E. A. Goulding provides for the conspicuous marking of goods manufactured outside the United Kingdom as "British Empire made" or "Not British," as the case may be, the idea being to obviate the necessity for giving an advertisement to a foreign trade rival, as is done by the familiar inscription "Made in Germany." Goods not complying with the provisions of the act would be prohibited from importation, and there would be a consular declaration in the case of goods marked "British Empire made." The measure has received in advance the approval of the Birmingham Chamber of Commerce, and it is claimed by its promoters that if passed it would do more than many "all-British shopping weeks" for the employment of British labor, while if similar legislation were carried in all parts of the Empire it would do much to encourage mutual British trade within the wide scope of our dominions.

This measure is significant of the apprehension of manufacturers by reason of foreign competition, their belief in the growing favor of British-made goods in the United Kingdom, and their unwillingness to advertise the place of origin of foreign goods. If it becomes operative it will bring to public attention most distinctly what articles offered for sale are of foreign origin. It is really in line with the same policy that dictated the requirements for gun proving, hall-marking of precious metals, and the provisions of the new patents and designs act, which requires that articles enjoying the benefits of the British patent laws be manufactured adequately in the United Kingdom.

AMBER INDUSTRY OF PRUSSIA.

[From Consul General A. M. Thackara, Berlin.]

Most of the German amber is found in the waters of east and west Prussia, and the industry is a monopoly of the Prussian State. The raw material may be gathered only by authorized persons and in accordance with regulations prescribed by the Royal Amber Works at Königsberg in Prussia. Raw amber in pieces of 2 inches and more is very scarce in Germany and the most of it is reserved for the home market. Only occasionally are a few pieces of the raw amber sold to foreign concerns.

Pressed amber, which is also produced at the Royal Amber Works, is made by a secret process. Small but good pieces of amber are melted to about 150° Celsius and then molded under very high pressure into various forms and plates. The plates can be sawed and turned and manufactured into different objects. Forms in the shape of cigar tubes and mouthpieces for pipes, etc., are exported in large quantities to the United States. The artificial amber, often called ambroid, has the appearance of amber, and the untrained can scarcely differentiate between them.

The Royal Amber Works has contracts with several firms in the United States which have the exclusive sale of the products of the royal factory. Pressed amber is the product dealt in. The average price of pressed amber is about \$26 per kilo (2.2 pounds). [The names of the American dealers having the sale of the products of the Royal Amber Works may be obtained from the Bureau of Manufactures.]

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8514. Shoes and rubbers.**—An American consular officer reports that a business firm in his district desires to represent in a Mediterranean country American manufacturers of shoes and rubbers. The firm desires exclusive rights and is in a position to handle a good line successfully. References can be furnished. Correspondence may be in English, French, or Italian.
- No. 8515. Coal.**—According to the report of an American consul, there may be an opportunity for the sale of American coal in a foreign country. One company which consumes about 340,000 tons of coal annually recently ordered 40,000 tons of American coal. This order was in the nature of an experiment, and it is reported that the price and quality of this first order are in the main satisfactory, causing the company to look favorably upon the United States as a source of future supplies. Copy of the complete report, giving further particulars, will be sent to interested firms by the Bureau of Manufactures.
- No. 8516. Scrap iron and steel.**—An American consular officer in Italy reports that a local business firm desires to represent in that country American exporters of scrap iron and steel, for which material there is a large and increasing demand in that market. References can be furnished. Correspondence in English, French, or Italian.
- No. 8517. Compressed-air drills.**—A business man in a European country informs an American consular officer that he desires to be placed in communication with American manufacturers of compressed-air drills for use in certain salt mines. The inquirer states that he has already furnished considerable machinery for these mines, and is in a position to place a number of drills. Designs, prices, terms, etc., are requested. The inquirer also states that he will furnish references, and can correspond in English or French.
- No. 8518. Lard and bacon.**—An American consular officer in Italy reports that a local business man desires to represent in that country American exporters of lard and bacon. References will be furnished. Correspondence must be in French or Italian.
- No. 8519. Oak railway ties.**—A business man in a European country desires to be placed in communication with American producers of oak railway ties with a view to representing them in the country in which he is located. He is in touch with the officials of certain railways, and therefore in a position to dispose of large quantities of ties if the price and quality are satisfactory. Oak ties are preferred, but beech ties, if chemically treated, are also acceptable. Normal sizes are 240 by 14 by 24 centimeters (7.874 feet by 5.51 inches by 9.448 inches). The inquirer also desires prices on 250,000 oak or chemically treated beech ties for a railway line, the construction of which has just commenced, to be furnished within four years. The sizes required in this instance are 220 by 18 by 13 centimeters (7.217 feet by 7.186 inches by 5.118 inches). The offer for these ties must be received before July 1. Prices should be quoted c. i. f. certain ports, and correspondence may be in English, French, Italian, or German.
- No. 8520. Agricultural implements and tools.**—A resident of a Latin-American country has been commissioned by a Government official to visit certain regions of the country to give practical lessons on the working of modern agricultural implements, besides distributing literature on this subject. An American consul believes this is a good opportunity for manufacturers of agricultural implements and tools to increase their sales in this territory, and if properly followed up might result in augmented trade. Catalogues (in Spanish) of agricultural implements and tools and, if possible, samples of small implements and tools and working models of the larger and expensive type, with complete explanation of the working parts, etc., should be sent at once to two persons whose names are given in the report.
- No. 8521. Soap-making machinery and appliances.**—A manufacturer in a foreign country producing limited quantities of lard wishes to add a factory of limited capacity for making soap. He desires not merely catalogues of soap-making machinery and appliances, but definite suggestions, illustrated catalogues, and full particulars, so that he will know what the necessary outfit will be and its cost.

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COMMERCIAL CONDITIONS IN LIVERPOOL.

[By Consul Horace Lee Washington.]

The port of Liverpool experienced great activity in its shipping business during last year. Good harvests generally and large outputs of ore and coal led to a demand from exporting countries for vessels.

This port, which handles nearly one-third of the trade entering and leaving (including transshipments) the United Kingdom, received its share of this expansion in commerce. The approximate inward and outward tonnage of the port for the year ended July 1, 1911, was 35,207,776 tons, or nearly 2,000,000 tons more than for the previous year. The rates and dues on merchandise received by the Mersey docks and harbor board during the period amounted to \$6,899,047, a gain of about \$300,000 over the previous year. This prosperity to the shipping interests came in a year that witnessed one of the most serious labor disturbances of recent years, and was particularly directed toward transportation.

Future Demand for Shipping.

An authoritative Liverpool shipping circular, discussing the existing favorable conditions in shipping, stated in part:

The tonnage afloat is well distributed. The imports and exports, although much in excess of previous years, still grow, and the volume of trade is likely to continue to increase, not only in the United Kingdom but also abroad, particularly in Canada and the United States. The anticipated opening of the Panama Canal and the development of trade in China, which can not be much longer delayed, are all factors which are certain to create a demand for steam shipping which will absorb the large amount of tonnage now building, and which can not possibly be delivered for months after the contract dates, owing to the general shortage of skilled labor which builders are experiencing as well as the difficulty in obtaining material.

Many of the large cargo steamers nearly completed have been sold at handsome profits, and few new steamers remain unsold. The cost of building has increased fully 15 per cent during the last 12 months and will go still higher, as steel plates will be further advanced in price. New steamers of 7,500 tons dead weight approaching completion could be bought a year ago for \$180,000 to \$185,000, but similar vessels are now worth \$220,000 to \$225,000, and other sizes in proportion. Second-hand steamers have likewise improved in value in a much greater ratio, and the market is almost depleted of what may be called cheap tonnage. Many fairly modern steamers have been resold at about 20 per cent more than what they realized two years ago, but the high level of prices of 1900 and 1901 has not yet been reached.

The same publication states that many vessels now being built are fitted with the Diesel engines, and if they prove successful will cause a change in steam shipping not experienced in many years. Oil fuel for steamers is making rapid strides and supply depots have been opened in different parts of the world. Steamers adapted to burn oil fuel require fewer hands than those using coal; besides, oil is more easily handled and is free from dust, which are important factors with passenger steamers.

Amalgamation of Shipping Lines—The Panama Canal.

The announcement in the latter part of November that the Cunard Co. had acquired an interest in the Anchor Line marked the final stage in the completion of two great shipping combinations which were arranged during the year. The first of these combinations was the amalgamation of the Royal Mail, Elder Dempster, Lamport & Holt, Brockleband, and the Union Castle steamship lines. The total tonnage controlled by this combination is approximately 1,319,333 and the capital \$39,702,902. The tonnage of the Cunard and Anchor Lines amounts to 422,813 and the capital \$14,794,160.

It is announced that Liverpool shipowners are preparing for the opening of the Panama Canal, which will revolutionize many of the existing trade routes, and one of the officials of the steamship combinations referred to above was reported to be leaving for Panama, the West Indies, and other Latin American countries to study new steamship routes.

New Service with United States Pacific Ports—Emigration—Dock Works.

Among the new services established during the year, the one of direct American interest was the inauguration of a new service of steamers by the Harrison Line from Liverpool to United States Pacific ports and British Columbia, via the Straits of Magellan.

The number of persons embarking at Liverpool for places outside of Europe during 1911 was 311,768, of whom 142,019 were destined for the United States, 140,724 for British North America, and 13,818 for Australasia.

Satisfactory progress is being made on the construction of the 1,020-foot dock, which is to be a part of a much larger undertaking. The present dock will cost \$2,432,250, and is unique, as a vessel can load and unload in it, and at the same time can be dry-docked. Owing to the shipping prosperity, the dock board is considering the advisability of proceeding with the full scheme, which contemplates the expenditure of \$15,573,384. [Further details of this undertaking were contained in this report and will be given to those interested in the project by the Bureau of Manufactures.]

Imports of Wheat, Flour, and Corn.

The Liverpool grain trade is not greatly affected by the results of the English wheat harvests, since this port is the center of the country's foreign grain trade. There was a decrease in the receipts of wheat into the port compared with 1910, the total imports amounting to 5,838,047 and 5,087,086 quarters of 480 pounds each for 1910 and 1911, respectively.

The imports of flour into Liverpool increased slightly as compared with 1910, but diminished in comparison with previous years. The total receipts in 1911 were 487,864 sacks of 280 pounds each, compared with 432,576 sacks in 1910.

The total imports of maize during 1911 amounted to 1,951,907 quarters of 480 pounds each, as compared with 1,552,575 quarters in 1910.

The following table shows the country of origin and quantity of wheat, flour, and corn imported into Liverpool for 1910 and 1911:

Countries.	Wheat.		Flour.		Corn.	
	1910	1911	1910	1911	1910	1911
America, North:	<i>Quarters.</i>	<i>Quarters.</i>	<i>Sacks.</i>	<i>Sacks.</i>	<i>Quarters.</i>	<i>Quarters.</i>
Atlantic ports.....	1,626,909	1,560,279	244,875	322,085	571,442	1,289,428
Pacific ports.....	141,000	27,293	12,210	5,129		
Australia and New Zealand.....	646,054	793,071	76,486	68,955		
Argentina, Brazil, and Uruguay.....	1,271,086	780,934	652	3,027	698,320	72,083
Black Sea, etc.....	1,187,664	994,695	34,919	44,453	125,261	507,625
India, etc.....	965,364	930,314		22,354	109,376	88,480
Other countries.....			63,434	21,861	48,167	24,291
Total.....	5,838,047	5,067,086	432,576	487,864	1,552,575	1,951,907

Prices of Wheat and Flour—Indian Flour.

The average price of American red winter wheat in Liverpool per 100 pounds during 1911 was \$1.76 against \$1.895 for the preceding year. The highest price was in February, being \$1.83, and the lowest in June and November, \$1.71. The average price of flours per sack of 280 pounds was as follows: American spring patents, \$6.92; American winter patents, \$6.56; and Liverpool-made patents, \$6.44. The highest point of American winter patent was in January, \$6.92, and the lowest in April, \$6.19; and the highest point of American spring patents was reached in October and November, \$7.41, and the lowest in April, \$6.44.

The import of flour from India was a new feature in the trade, but it was stated that it did not meet with approval and realized a price very little above that of American baker's grade, and about 73 to 97 cents below the best brands of American spring flour.

It was stated that the relatively high prices of wheat and flour in the United States last year militated against the flour imports into Liverpool. The prospect for the current season, however, is better, owing to the larger stocks of wheat in the United States.

Imports of Beans, Oats, etc.—Flour Milling.

There were 60,059 quarters of 480 pounds each of beans imported, 247,576 quarters of 400 pounds each of barley, 120,301 quarters of 504 pounds each of peas, 449,804 quarters of 304 pounds each of oats, and 75,251 loads of 240 pounds each of oatmeal.

There are within the Liverpool consular district 15 flour mills having a capacity of 835 sacks of 280 pounds per hour, and within a radius of 35 miles of Liverpool are 25 mills with an aggregate capacity of 1,160 sacks per hour. Owing to the considerably higher prices of imported wheat last year compared with the native product, the country millers, whose trade is largely confined to the home-grown wheat, enjoyed larger and more profitable trade than for some years, while those in the Liverpool district engaged in milling the imported wheat experienced unsatisfactory business.

Rules Governing Corn Shipments from United States.

The Liverpool Corn Trade Association states that numerous complaints were made during last year of the bad condition in which

maize was received from the United States. The following conditions have been agreed upon between that association and the Commercial Exchange of Philadelphia in reference to future shipments of No. 2 corn from that port to Liverpool:

(1) Natural No. 2 corn shall not contain at time of shipment, between March 1 and July 1 in any one year more than 16 per cent of moisture; (2) artificially dried No. 2 corn shall not at time of shipment during any period of the year contain more than 16 per cent of moisture; and (3) certificate of moisture at time of shipment, issued by chief inspector, shall accompany the documents.

Receipts and Shipments of Cotton.

The annual statement of the Liverpool Cotton Association for the year ended August 31, 1911, shows the total imports of raw cotton into the port of Liverpool from all sources as 4,348,608 bales of an average net weight of 503 pounds each, as compared with 3,340,039 bales of 490 pounds in the previous year. The following table shows the quantities imported for both years and the average net weight in pounds:

Description.	1909-10		1910-11	
	Bales.	Weight.	Bales.	Weight.
American.....	2,712,823	490	3,371,555	496
Brazilian.....	55,085	342	124,784	314
Egyptian.....	310,950	734	602,823	741
Peruvian.....	101,396	212	97,200	169
West Indian.....	11,789	310	4,330	414
African.....	21,377	307	12,212	350
East Indian, etc.....	126,610	400	135,704	400
Total.....	3,340,039	.....	4,348,608	.....

The exports of raw cotton from the port of Liverpool during 1910-11 were 403,172 bales with an average net weight of 528 pounds. Of the total, 225,367 bales were American and 149,259 bales Egyptian.

Prices of Cottons—Future Demands.

The following were the average prices of cotton per pound in Liverpool during the season 1910-11: Middling American, 15.89 cents; fair Peruvians, 16.77 cents; fair good fair Egyptian, 21.79 cents; good Bownuggar, 13.62 cents; and No. 1 good Oomra, 13.75 cents. The highest point of American middling was 17.07 cents per pound on May 12, and the lowest 13.28 cents, July 31.

As to the present season, a cotton trade publication states that although the Egyptian and East Indian crop advices are not satisfactory, the increased American output will more than make up the deficiency. It is estimated by the best authorities that 1,000,000 bales of American cotton will be required to supply the deficiencies of the other world crops, such as Indian, Egyptian, etc.

As to the requirements in Great Britain, business is healthy and both spinners and manufacturers have large contracts for future delivery. Last season the average weekly consumption was 72,615 bales of 500 pounds each, but this season it will be about 79,000 bales.

The Apple Market—Imports of Oranges.

There was an increase of about 160,000 barrels in the quantity of apples arriving from the United States and Canada during last year compared with the previous one, but a decrease of about 120,000 in

the number of boxes arriving. The increase in barreled apples, it was stated by an authority in the fruit trade, was due to the larger crop in the Hudson River and Nova Scotia districts, and the smaller receipts of boxed apples to the smaller crop in what is known here as the box-growing district, which is west of the Rocky Mountains, and because supplies had been held back in anticipation of higher prices later in the season.

The total apple imports into Liverpool during the season 1910-11 were 649,055 barrels (which included 361,268 boxes, calculated at 3 boxes to the barrel). The prices for barreled apples were considerably lower at the beginning of the present year than for the same time last year on account of the larger supplies, due somewhat to a larger crop than usual in Great Britain, but the boxed apples averaged about 36 cents per box higher.

The imports of oranges up to December 27, 1911, were as follows: Valencia, 213,709 cases; Jaffa and Syria, 154,326 packages; Malaga and Seville, 24,823 packages; Naples, Palermo, and Messina, 12,215 packages; and Portugal, Florida, etc., 10,149 packages.

The Tobacco Market.

The tobacco market was steady throughout last year, what changes there were in prices tending upward. According to the review of a leading import firm, from the American reports received, it is anticipated that the conditions of last year will continue throughout 1912. The most satisfactory feature was the recovery of deliveries for home consumption, which during 1911 increased nearly 5,000,000 pounds over 1910. The prices of some of the grades of tobacco in Liverpool during 1911 were as follows, in cents per pound:

Strips, western: Filler, 12 to 12.5; rather short, 13 to 14.5; very middling to middling, 15 to 16; good to fine, 16.5 to 18. Virginia dark: Filler, 14; rather short, 14.5 to 16; very middling to middling, 16.5 to 17.5; good to fine, 18 to 22. Virginia and Carolina bright: Semidark, 14; semibright, 15 to 17; medium or mixed, 18 to 21; good to fine, 23 to 28. Leaf, western: Filler, 8 to 8.5; medium, 11 to 12.5; good to fine, 13 to 14. Virginia dark: Filler, 10.5; medium, 11.5 to 12.5; good to fine, 13 to 15. Virginia and Carolina bright: Semidark, 12; semibright, 13 to 15.5; mixed or medium, 16 to 21; good to fine, 21.5 to 27.

The stocks of the various grades of tobacco on hand at the end of 1911 were as follows, in casks: Virginia leaf 52,096, strips 19,193; western leaf 28,539, strips 7,211; all other, 587.

Effect of Increased Shipping Rates on the Lumber Market.

An authoritative source estimates the tonnage employed in the timber trade of Liverpool and other Mersey ports (including that which entered the Manchester Ship Canal from the River Mersey) during 1911 at 737,000 tons. While this is 43,000 tons in excess of the figures for 1909, it falls 32,000 tons below the estimated figures of 1910.

The advance in the freight rates which went into effect during the latter part of 1910 continued throughout last year, and another advance the coming season is not improbable.

Imports of pitch pine from the United States fell slightly below the totals of 1910, the market showing no interesting development until the autumn, when an advance in values was established due to an advance in the ocean freight rates. This has discouraged importers from entering into forward engagements at current quotations, and as a consequence consumption has exceeded imports both in timber and deals, and holders of stocks have benefited thereby. While stocks

of timber are moderate, deals and boards, although not excessive, are regarded as quite sufficient for present demands. The present demand in deals and boards is largely confined to the better grades.

The imports of American hewn pine amounted to 140,000 cubic feet and sawn pine 2,646,000 cubic feet, compared with 166,000 and 2,619,000 cubic feet for 1910, respectively. The stock of sawn pine on hand at the end of 1911 was estimated at 636,000 cubic feet. Logs were freely imported from Mobile and other Gulf ports last year, amounting to 117,000 cubic feet. The stock on hand at the end of 1911 was small, with good demand at moderate prices. The imports of oak planks were in excess of last year, and there was a fair demand throughout the year. There was on hand at the end of the year 170,000 cubic feet, compared with 337,000 the preceding year.

Imports of Walnut Logs, Whitewood, Staves, Mahogany, etc.

The imports of walnut logs from the United States were light, and stocks were reported small at the end of the year, with a demand for medium to large size logs of prime quality. The receipts of whitewood logs were smaller than during 1910, being 149,000 cubic feet against 269,000 cubic feet. The stock of hickory logs on hand at the end of 1911 was small, with a demand for strictly first-class wood. The receipts of ash logs were in excess of 1910, with a demand for good quality logs.

The total imports of staves from the United States were 3,622 mille, of 1,200 each, against 4,717 mille in 1910. A local authority stated that the reduced imports last year diminished the stocks considerably, the arrivals consisting principally of dressed stock for brewers and palm-oil coopers. Conditions in the wine-pipe trade were quiet, and exporters should be cautious in shipping 60-inch pipes.

The imports of all kinds of African mahogany logs, except Gaboon, during last year were 43,243 tons, against 46,623 tons the preceding year. There was an advance in the prices of both boards and logs. The market was slow until the last part of the year, when two large American firms became extensive buyers, and during the last three months buying became general. The outlook for 1912, according to one well informed in the trade, favors shippers, because one or two of the largest exporters from the West Coast of Africa will restrict supplies and do all in their power to keep prices up. The shipbuilding industry was responsible for a large part of the support given the trade last year.

The Tin-Plate Trade—Imports of Copper.

Although there was a decrease of over \$1,000,000 in the value of shipments of tin plates to the United States last year compared with the previous one, this decrease was more than made up in the expansion of trade with other countries. There were 60 more mills in operation in Wales at the end of 1911 than for the same period in 1910. The average price of 1G 20 by 14 coke tin plates, f. o. b. Wales, last year was \$3.38 per 112 pounds, an increase of 12 cents over the average for the preceding year. The highest was in February, \$3.65, and the lowest in November, \$3.22.

Statistics showing the imports of fine copper into each port are not tabulated, but the receipts at Liverpool, Swansea, London, and other outports during last year amounted to 167,878 tons, against 162,181

tons for 1910. Of the foregoing total last year the United States led with 47,631 tons, followed by Spain and Portugal with 33,916 tons; Australia, 26,363 tons; Chile, 20,688 tons; and Mexico, 12,070 tons. Last year opened with standard copper quoted at \$272.83 per ton cash, and closed at \$306.58.

Decreased Receipts of Cattle from Canada.

The number of live cattle imported into Liverpool during 1911, according to local trade statistics, was 75,936, as compared with 77,640 in 1910. The imports of live sheep increased last year to 40,338, compared with 304 for 1910. These imports were entirely from the United States and Canada.

Commenting upon the cattle trade for last year, an official of the Port of Liverpool Cattle Traders' Association stated that had the normal supplies of cattle come from the northwest of Canada the number imported would have shown an increase. Returns from Canada give the number of ranchers exported as only 10,000 head, a small proportion of which arrived at Liverpool. The reasons given for the falling off last year of 30,000 to 40,000 head in the shipments of ranch cattle were the increased Canadian demand and that the movement of northwestern cattle is to Vancouver and not to England; that a severe winter, followed by a summer drought, retarded the growth of animals; and that the abnormally severe winter of three years ago swept the ranches of many thousands of young stock that would have been available for export last year.

Cattle arriving from the United States up to the beginning of July were in better condition than for some years previous, but owing to the drought and the consequent failure of feed the arrivals in the latter part of the year were in poor condition.

Imports of Chilled and Frozen Meats.

The price of beef at the end of 1911 was 2 cents per pound higher than for the same period in 1910. This increase was mainly due to the abnormally dry summer in England, thus increasing the prices of foodstuffs, and the falling off in the Irish shipments. The influence of the large imports of Argentine chilled beef is felt on the best cuts of American meat. The South American article comes into competition with the rougher cuts of the home-killed, with the consequence that, to restore the average price of the sides, the better cuts have advanced in value.

Local trade statistics show the imports of chilled beef from the United States as 7,873 quarters, from River Plate 499,194 quarters, and from Australia and New Zealand 4,300 quarters. Frozen beef imports were as follows: From River Plate 841,349 quarters, and from Australia and New Zealand 267,433 quarters.

Frozen mutton and lamb carcasses continue to arrive at Liverpool in increasing quantities, the total in 1911 being 3,667,042 quarters, 2,136,107 quarters of which came from the River Plate, and 1,530,935 quarters from Australia and New Zealand.

The Wool Market.

One of the leading wool merchants of Liverpool comments on the course of the wool market in 1911 as follows: There was a decline in the price of clothing wool varying from 1.72 per cent on Lima wool to 12.12 per cent on New Zealand merino, the principal causes assigned

therefor being the strong movement in England and on the Continent to depress prices in view of ample supplies available in Australia and Argentina, and the absence of active American support during the major part of the year.

The demand for alpaca was slow owing to the absence of American orders for alpaca linings and to the fashion changing from black to colored linings, in the manufacture of which alpaca can not be used. The following were the prices at the end of 1911 of the various wools:

Clothing—New Zealand, unwashed, good, 29 cents; Peruvian, washed, average, 21.5 cents; Lima, unwashed, average, 12 cents; Abudia, unwashed, average, 10 cents. Combing—Lincoln, hog fleece, 20 cents; alpaca, Islay fleece, good average, 31.5 cents; alpaca, Callao fleece, average, 23 cents; mohair, Turkey fleece, fair average, 31.5 cents.

Imports and Prices of Rubber.

The total estimated imports of all varieties of rubber into Liverpool during 1911 were 23,474 long tons, against 27,224 tons in 1910. The importance of this market in the rubber trade may be gathered from the fact that the estimated imports of all descriptions into London during 1911 amounted to 13,368 tons, against 9,236 tons in 1910, and into Antwerp, Belgium, another important rubber market, 4,265 tons as compared with 3,995 tons during 1910.

The total imports of Para rubber into Liverpool for the year were 15,584 tons, against 18,009 tons in 1910. Of the total estimated shipments from Para to all parts it is calculated that Liverpool took well on to 50 per cent, as compared roughly with the same amount during the previous year. The demand for fine Para rubber was good, especially during the last six months of 1911, deliveries to the United States and Europe during that period showing an increase of 6,141 tons. The maximum price paid during 1911 for fine Para rubber was \$1.70 per pound against \$3.04 in 1910. The lowest price reached was 98 cents against \$1.35 during 1910. The prices for Negro-head India rubber were also much below those paid in 1910, the highest and lowest for that grade in 1911 being, respectively, \$1.24 and 79 cents; and in 1910, \$1.97 and \$1.01.

The total estimated exports from Liverpool of all descriptions amounted to 18,595 long tons, of which 6,075 tons went to the United States and 12,520 tons to other countries.

Decreased Butter Supplies—Decline in Prices of Bacon.

One of the leading importers of provisions and dairy products in Liverpool stated that the almost universal drought last year caused a shortage in the receipts of dairy products from all sources, and that prices advanced considerably. Irish creamery butter at the end of November sold at \$32.11 to \$32.84 per hundredweight of 112 pounds, against \$25.79 to \$26.76 for the same date the preceding year. New Zealand butter sold at \$32.11 to \$32.59 on December 31, against \$25.79 to \$26.03 on the same date in 1910, and Danish butter sold at about \$1 per hundredweight higher than the New Zealand product.

The prices of bacon, though high, were considerably lower than for 1910. There was a gradual decline up to the end of May, followed by a recovery up to the end of August, when they gradually declined again. The prices of bacon per hundredweight of 112 pounds at the end of 1911 were as follows: Long clear, \$11.92 to \$12.40; backs,

\$11.55 to \$12.38; bellies, \$11.92 to \$12.65; and Cumberland cut, \$11.06 to \$12.16.

Decrease in Price of Hams.

Hams, as usual, were little in demand during the first three or four months of the year, and prices receded during that period about \$2.43 per hundredweight, but the phenomenally dry summer induced a good demand, which started earlier than usual, and with supplies only moderate, quotations gradually advanced quite \$4.86 per hundredweight from the lowest figures, the end of August, as in the case of bacon, registering the highest figures.

From August up to Christmas there was a gradual decline in prices. American cut hams on December 31 sold at \$13.38 to \$13.98 per hundredweight compared with \$15.32 to \$16.20 for the same date in 1910, and long-cut hams sold at \$12.77 to \$13.62 against \$14.59 and \$16.29 for the previous year. One importer stated that the decrease in the price of hams at the end of the year was due to the increased killings of the home-fed hogs, larger receipts of hogs at American packing points, and increased killings in Denmark and other Continental countries, with consequent increase of shipments to Great Britain.

Another importer stated that the shortness in feeding stuffs caused farmers to kill an exceptionally large number of their hogs and the English market was flooded with Danish, Irish, and home-cured meats, which were sold cheaper than the American product.

Russia and the Balkan States, a comparatively new source of supply for the Liverpool market, are now sending quantities of hog products at reasonable prices, and find a ready market.

Increased Interest on the Part of American Exporter.

Commercial correspondence shows in a most encouraging manner that the American manufacturer and exporter and the consulate are getting closer together. The circular drag-net letter that obviously was sent to every consulate is of the past. The present-day letter calls for business information and in detail. It comes from an "export department" of the firm, and possibly is written by someone who has studied the question, and the consul has the feeling that a good business reply is going to be made use of actively, and trade secured through it if possible.

In former days a letter acknowledging a report made to an inquirer was so rare as to call for comment. Now further correspondence is the rule rather than the exception, and at times the American writer will go to the trouble of replying at length and saying why the prices or conditions or other circumstances reported to him do not allow of his particular firm doing business. This helps, for prices may change later, or suggestions may be made in the light of this further information from the inquirer that will show a way of meeting the apparently unfavorable conditions, and, in any event, it helps the consul in a broader knowledge of the matter under investigation, which may assist the inquirer also, and it aids much in promoting that closer touch which makes for business.

Information at the Bureau of Manufactures.

It appears here and there through the commercial correspondence that information as to price, statistics, advertising pamphlets, etc.,

which is sent to the Bureau of Manufactures at Washington, where it is near at hand for any and various uses, is not always availed of by those who are informed that this information is on file in the bureau. In some of these cases there seems to be a feeling that some advantage is to be obtained if the consul instead of the bureau is corresponded with. This is not so, and only loss of time results.

Reduced Shipments to United States.

There was a decrease of \$7,356,828 in the value of the merchandise invoiced through the American consulate at Liverpool to the United States during last year compared with the previous one, but an increase of nearly \$2,000,000 compared with 1909. About \$5,000,000 of the decrease last year was attributed to the reduced shipments of the following articles: Palm oil, tin, tin plates and terneplates, raw cotton, oils, mahogany, wool, hair and noils, and ferromanganese.

There was an unusually large shipment of palm oil to the United States in 1910 due to the shortage of greases and cottonseed oil in that country, and the prices averaged in that year \$157.46 per ton against \$138.47 for last year; hence the decrease in the exports last year.

Cause of Decline in Shipments of Cotton and Wool.

The large increase in the value of cotton exported to the United States during 1910 was due to the low price of East Indian, which made it possible for that article to compete in the American markets with the home-grown staple. Throughout 1911 the East Indian was higher in price, and, taken in conjunction with the low price of the American-grown staple, brought about the marked decrease in shipments.

The wool trade between Liverpool and the United States fell off during last year due to the good demand of the home market and the consequent stiffening of prices, which caused decreased orders from the United States.

Greatly Reduced Shipments of Tin Plates and Mahogany.

The decrease of more than \$1,000,000 in the declared exports of tin, tin plates, and terneplates to the United States may be charged wholly to tin plates. Shipments of this commodity have fallen off by reason of the firm bid made for the home market by American producers, dating from the latter part of 1910, and which was continued throughout last year.

The decrease in the declared exports of mahogany was caused by some buyers in the United States purchasing on the African coast and shipping direct to the United States. The mahogany which was put on the market during the year was of a lower quality than that for 1910, and therefore brought lower prices.

Gains in Exports of Rubber and Fertilizers.

The increase of \$476,961 in the value of rubber shipments to the United States is much more significant than would appear, as the price of this product was much lower last year than for 1910. The increase was necessary to replenish the stocks which had been depleted during the latter year, when prices were too high to warrant unnecessary orders.

Better prices and larger tonnage account for the increase of over \$1,000,000 in the declared value of manures. The Southern States

took almost the whole of this, the demand in that part for fertilizers having grown steadily in the last few years. Contracts for the year are made between early winter and March of the next year. The shipments to the Northern States are growing, and according to contracts in hand a much larger percentage of the shipments will go to the Northern States than formerly.

Declared Exports to United States.

The following table shows the articles and their value invoiced through the American consulate at Liverpool to the United States during 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Ale, beer, and mineral waters.....	\$302,435	\$187,374	Manures.....	\$1,622,376	\$2,650,546
Animals.....	70,665	59,423	Metals:		
Bags and bagging.....	509,558	411,328	Aluminum.....	27,684	13,824
Books and stationery.....	10,205	20,063	Other than iron, steel, and copper.....	172,719	114,057
Bricks and tiles.....	67,576	60,047	Minerals.....	43,460	29,248
China clay.....	33,016	15,839	Nuts.....	119,800	55,222
Coal and coke.....	18,894	17,704	Oakum.....	16,044	16,264
Cocoa.....	45,406	333,684	Oils:		
Copper.....	1,003,580	307,594	Palm.....	3,889,435	2,117,740
Cotton (raw).....	2,210,217	1,372,860	Cocunut.....	553,982	317,306
Cotton manufactures.....	102,013	138,430	Soya-bean.....	565,499	349,089
Chemicals:			Other oils.....	1,190,046	626,279
Ammonia—			Oleostearin.....	96,201	943
Sulphate of.....	694,629	298,147	Paints and varnish.....	13,744	22,463
Muriate of.....	49,706		Paper-making material.....	542,001	525,418
Bleaching powder.....	151,661	61,812	Pitch and tar.....	34,115	5,147
Caustic soda.....	44,341	6,271	Provisions.....	178,404	6,721
Carbolic acid.....	100,077	71,445	Rice and rice flour.....	77,759	103,712
Chlorate of potash.....	63,692		Rubber.....	10,071,379	10,548,340
Sol ammoniac.....	91,975	161,470	Salt.....	264,865	281,405
Salt cake.....	97,049	56,256	Sausage casings.....	52,836	35,956
Soda ash.....	39,879	38,497	Seeds.....	418,929	182,015
All other chemicals.....	93,442	66,515	Steel and manufactures.....	225,944	221,003
Drugs.....	12,821	13,334	Sugar.....	472,603	127,728
Dye and dyestuffs.....	10,806	6,940	Tanning materials.....	52,018	38,729
Earthenware and glass-ware.....	91,565	76,400	Tapestry and crelomes.....	12,967	15,536
Fish and game.....	966,321	471,484	Tapioca flour.....	104,720	70,961
Foods (cattle).....	53,475	49,786	Tin, tin plates, and torne-plates.....	5,337,551	4,175,646
Fruits and vegetables.....	315,760	354,196	Tobacco.....	190,097	32,470
Fruits, preserved.....	35,848	38,997	Waste (wool, silk, and thread).....	58,474	64,431
Furniture.....	25,912	40,957	Wax.....	44,741	32,519
Ginger.....	119,919	205,545	Wines and spirits.....	16,902	47,234
Glue and glue stock.....	106,031	115,018	Wool, hair, and noils.....	1,863,516	1,717,055
Glycerin.....	643,902	771,377	Woolen manufactures.....	24,847	9,883
Gravel spar.....	134,644	58,327	Woods:		
Grease and soap.....	28,450	9,162	Mahogany.....	1,230,286	787,308
Hemp and flax.....	11,376	16,900	Teak.....	23,314	43,110
Hides and skins.....	613,888	390,153	Walnut.....	130,200	193,038
Iron and manufactures:			Dye and other woods.....	28,371	21,328
Ferromanganese.....	1,791,599	1,739,008	All other articles.....	123,779	112,034
Other manufactures.....	737,147	264,131			
Leather.....	154,162	104,966			
Linen and lace goods.....	223,107	147,348			
Machinery.....	81,381	129,013			
			Total.....	41,609,916	34,313,088

Exports to Insular Possessions—Shipments from St. Helens.

The shipments to the Philippine Islands amounted to \$1,020,668, a decrease of \$157,553 compared with 1910, due principally to reduced exports of cotton manufactures. The principal items and their value for 1911 were as follows: Cotton manufactures, \$517,339; railway material, \$146,184; machinery, \$65,106; soap, \$55,053; ale and beer, \$49,499; steel and manufactures, \$28,894; and paints and varnish, \$20,131.

The exports to Hawaii were valued at \$161,168, a gain of \$91,524, compared with 1910, due to increased shipments of fertilizers. The main items in the exports for 1911 were: Manures, \$106,162; woolen

manufactures, \$11,512; cotton manufactures, \$11,229; and iron and steel and manufactures, \$9,471.

The shipments to Porto Rico were valued at \$17,910, against \$36,163 for 1910, and consisted principally of steel and manufactures, \$10,987; sal ammoniac, \$3,430; iron and manufactures, \$1,633; and cotton manufactures, \$1,001.

The total value of the exports invoiced through the St. Helens agency to the United States during 1911 was \$863,245, a decrease of \$80,089, compared with the previous year. The principal items and their value were: Bleaching powder, \$417,782; window glass, \$146,942; hide cuttings and glue stock, \$60,541; tanning materials, \$68,338; steel and manufactures, \$29,606; caustic soda, \$23,709; glass tubes, \$21,423; venetian red, \$15,363; and antimony, \$15,895. There were no articles invoiced through the agency at Holyhead to the United States.

Municipal Notes, etc.

The extension to the Adelphi Hotel, costing about \$388,000, is nearing completion. This hotel is owned by the Midland Railroad.

A large number of country estates were bought on the market during last year, and tenants were enabled to acquire their farms upon fair and often generous terms.

The new head office building of the Liverpool Friendly Society was completed during the year at a cost of \$3,136,580. The rental capacity is figured at \$160,594.

The famous golf links at Hoylake, the area of which is 164 acres, have been purchased by the Royal Liverpool Club for \$145,995.

There are now 59 parks, gardens, and recreation grounds under the control of the city council, exclusive of the Bowring estate, with a total area of about 1,000 acres and involving an annual maintenance cost of upward of \$145,995.

FORESTRY IN SOUTH AFRICA.

[From Consul Edwin N. Gunsaulus, Johannesburg.]

Outside of the operations of the Forest Department there are practically no forestry operations in South Africa. The Government holds nearly all the lands of forest value, and the Forest Department purchases seeds from abroad and both sells seeds and raises large quantities of trees for transplanting which it sells at low rates to the public. The officer in charge of the Forest Department of the Union of South Africa is Mr. J. Storr Lister, Chief Conservator of Forests, Pretoria, Transvaal.

Elementary forestry, enabling students to enter the subordinate grade of the Government forest department, is taught at the Government forest school at Tokai, near Cape Town, Cape Colony, and a course in forestry suitable for farmers is given at the Government agricultural school of Cedara, in Natal Province. Vacancies in the higher grades of the forest service are filled from the South African Rhodes scholars who successfully pass through the Oxford School of Forestry, with its attendant courses on the Continent of Europe.

[A list of names and addresses of Johannesburg nurserymen and seedsmen dealing in tree seeds may be obtained from the Bureau of Manufactures.]

DEPLETED STOCKS OF GRAIN IN GERMANY.

[From Consul General A. M. Thackara, Berlin.]

The Imperial Gazette has recently published estimates made by the German Agricultural Council of the amount of the principal cereals still in the hands of the producers on March 1 and the percentage of the farmers' stocks of the total grain crops of the previous harvest year. The figures, which also include the estimates for the years 1911 and 1910, are as follows:

Cereals.	1910		1911		1912	
	Tons.	Per ct.	Tons.	Per ct.	Tons.	Per ct.
Wheat.....	3,755,747	22.6	3,861,479	22.8	4,066,335	20.2
Rye.....	11,348,415	27.8	10,511,160	26.9	10,806,116	22
Oats.....	9,125,816	36.9	7,900,376	35.9	7,704,101	31.1
Barley.....	3,495,616	26.2	2,902,938	23.2	3,159,915	16.5

The above statistics do not include the quantity in the hands of second parties, but, as stated, only the percentage of the stocks actually held by the farmers themselves.

The reasons assigned for the comparatively small amounts of the farmers' grain stocks on March 1, 1912, are that, on account of the early ripening of the grain last year, the crops were marketed sooner than usual and that, owing to the great drought which prevailed last summer throughout Germany, the fodder stocks were very low, so that the farmers were obliged to purchase outside supplies, and the proceeds from the sales of beets being smaller than usual the farmers were therefore in need of ready money and had to realize on their grain. As to rye, owing to the drought, larger quantities than usual had to be used as fodder.

The quality of the last year's crop of native bread cereals was excellent and, as the foreign supplies were below the normal, the amount of native wheat and rye used for bread-making purposes was very large.

The farmers' stocks of barley, it is thought, will be mostly taken for seeding and their oats will be used for feeding cattle, so that the quantity of these two cereals which will be placed in the market will be small.

Spanish Congress on Viticulture.

The Department of State is in receipt of a note from the Minister of Spain at this capital relative to the National Congress on Viticulture that will be held at Pamplona, Spain, in July of the present year. The minister desires that this matter be brought to the attention of American organizations which might be interested.

Higher Ocean Freight Rates.

Supplementing his report on the proposed increase in freight tariffs between Peruvian and Chilean ports and Europe, published in Daily Consular and Trade Reports February 27, 1912, Consul General W. Henry Robertson, of Callao, has forwarded copies of the new rates. These schedules are on file in the Bureau of Manufactures.

ONTARIO MOTOR LEAGUE SHOW.

[From Consul R. S. Chilton, jr., Toronto, Canada.]

The recent annual automobile show under the auspices of the Ontario Motor League was much the largest ever held in Toronto and was most successful. It is said that of the \$1,000,000 worth of exhibits at least half were from the United States, most of the leading makes of cars and accessories being well represented, the others being Canadian, with a few British and foreign cars. It is said that the sales amounted to over \$500,000. One of the local papers sums up the main features as follows:

In general, it may be said that the cars on exhibition differ very little in their main essentials from those shown last season, the improvements in the new models being mainly in the line of refinement, especially in the body building. The limousine type is more prominent than ever, the interior appointments attaining remarkable luxury in many cases. In these cars electric lighting and hot-water heating are nearly universal, and many new ideas are shown in the way of attachments of convenience to the passenger. In the open cars the fore doors are now a practice without exception, even in the small runabouts, and the favorite style of body seems to be a compromise between the old tonneau and the straight-line torpedo effect of last year.

In the matter of engines, no car is shown with fewer than four cylinders, and the number of makes of "sixes" has increased greatly. Self-starters, as part of the equipment, are much in evidence. There is a noticeable tendency toward similarity in construction, it being difficult in many cases to distinguish between the classes of different makes of the same size.

At the same time this exhibition was open another automobile show was in progress at the Market Building, and this also included a large number of well-known American cars.

A copy of the catalogue of the first-mentioned show is forwarded [and will be loaned by the Bureau of Manufactures to interested firms].

"MADE IN CANADA" EXHIBITION TRAIN.

[From Consul R. S. Chilton, jr., Toronto.]

The Canadian press announces that a "made-in-Canada" exhibition train will leave Toronto in May on a tour from the Atlantic to the Pacific. This moving exhibition, arranged by the Canadian Home Market Association, is intended to show the quality and variety of goods manufactured in Canada with the idea of extending the home market for them. The train will consist of 12 cars, 10 containing exhibits of the different Canadian factories and 2 the accompanying staff. The route is from Toronto to Montreal and Ottawa, thence to about a hundred towns and cities in western Canada. The exhibition will include textiles of all kinds, stoves, pianos, automobiles, beds, springs, mattresses, engines, packing-house products, confectionery, rubber goods, salt, kodaks, farm implements, paints and oils, drugs, cement, furniture, jewelry, watches, silver plate, sheet-metal products, etc.

There will be a model-house car, fully furnished, and showing the products of numerous Canadian factories; also composite exhibits showing the process of manufacture of raw steel into its many finer products. In addition illustrated lectures will be given on board by T. H. Race, of Mitchell, Ontario, who has been Canada's representative at the world's fairs in Australia, New Zealand, Great Britain, and Belgium.

By charging a rental for space the exhibit is made self-sustaining. Each car represents in rents about \$3,000. No actual exhibits will be sold en route, but representatives of each exhibiting firm will take orders and advertise the goods throughout the trip.

NEW WAGE SCALE IN BOHEMIA.

[From Consul J. I. Brittain, Prague, Austria.]

Referring to a serious lockout in the metal-working industry in Bohemia, the following is an outline of the basis of settlement.

The normal working time is fixed at 54 hours a week, the division of said working time being regulated by each factory according to existing conditions. On Christmas Eve day, work is to be done only in the forenoon, the workmen to receive pay for 4½ hours' work for the afternoon according to their usual wages. On Easter and Whitsuntide work is to be done only in the forenoon, with no compensation for the half holiday. There will be no work and no compensation for May 1. In case the contemplated reduction of holidays is introduced in Bohemia, every workman who has worked for a factory four years shall have a vacation of three days, with his wages paid in full.

The nominal wage of a skilled workman is fixed at \$0.064 per hour, but from July 1, 1913, \$0.064 to \$0.076 per hour. In Prague assistant foundrymen will receive \$0.076 per hour, in the country only \$0.073 per hour. All other workmen, except foundrymen, will receive \$0.064 to \$0.076. Workmen now receiving \$0.091 per hour will receive an increase of \$0.006 per hour; those receiving more than \$0.091 per hour will have an increase of \$0.004 per hour. A further increase of \$0.002 per hour is to be given from July 1. All overtime work will be compensated; on Sunday and holidays it will be figured according to the present increased wages. A skilled workman doing night work will receive additional pay of \$0.203 and an assistant \$0.162. The agreement is binding up to December 31, 1915, annually renewed thereafter.

INDIRECT TRADE IN AMERICAN FLOUR.

[From Consul S. M. Taylor, Nottingham, England.]

There are no firms which are direct importers of flour into the Nottingham district, nor do any of the large consumers buy their flour direct from foreign sources. A large amount of the flour consumed locally, however, is of foreign origin, but is purchased from wholesale agents and importers situated chiefly in Liverpool, Bristol, London, and Hull. A fair amount was originally purchased abroad by Nottingham firms and imported direct, but this method has been abandoned for some years on grounds of economy.

The proportion of American flour used here has appreciably declined during recent years; a local baker, who is one of the largest purchasers in this district, giving as an example of the present tendencies an order he has just placed for 500 bags, 100 of which are American and 400 Canadian. A remark of his was interesting: "We should be sorry to do without the stronger American grades, especially Minnesota and Dakota wheats; we consider them superior to anything that comes from Canada." Flour here is purchased by the bag, containing 140 pounds, instead of by the barrel. It would certainly be well for American millers to conform to the recognized unit and ship in 140-pound bags.

[The names of three prominent flour-importing firms of the United Kingdom, transmitted by Consul Taylor, may be obtained from the Bureau of Manufactures.]

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 5522. Metal ceilings.**—An American consular officer in France reports that metal ceilings are unknown in his district, but that a prominent French architect desires to receive samples, free of charge, together with catalogues and particulars as to methods of application, all in the French language. If the ceiling proves suitable the applicant would be disposed to bring the matter before the society of architects in that district.
- No. 5523. Hardwoods.**—A firm in Italy informs an American consular officer that it desires to be placed in communication with American exporters of hardwoods, especially oak and satin walnut, with a view to purchase or represent them on that market. References can be furnished.
- No. 5524. Cement and tile-molding machines.**—An American consular agent in Mexico reports that on account of the installation of a new water and sewerage system in the city in which he is located more attention will be given to roof drainage. Therefore cement blocks, etc., should appeal to builders. The consular agent transmitted the name of a person who desires catalogues (in Spanish) of machines for making cement blocks for drainage; also for ordinary kiln-burned drain pipe.
- No. 5525. Axle washers.**—An American consul in Canada transmitted to the Bureau of Manufactures the name of a firm in his district which desires to purchase vulcanized fiber axle washers.
- No. 5526. Scrap steel and pig iron.**—A firm in Italy informs an American consular officer that it wishes to be placed in communication with American producers of pig iron and scrap-steel rail cuttings, known in England as "crop ends," with a view to representing them on that market. The minimum length of the cuttings must not be less than 20 inches. Correspondence in French or Italian.
- No. 5527. Sickle-manufacturing machinery.**—An American consular officer in Russia forwarded the name of an American citizen who wishes to be placed in immediate communication with American firms capable of equipping a factory with machinery for the manufacture of a million sickles monthly.
- No. 5528. Household goods.**—A firm with offices in England and China, but incorporated in Sweden, expressed a desire, through an American consular officer in England, to be placed in touch with suppliers of sanitary seats, blind rollers, curtain poles and rings, broom handles, and washboards in the United States.
- No. 5529. Coal.**—An American consular officer in Italy reports that there is a large demand in that country for coking coal and splint, or cannel, coal for use in the steel works. The name of a firm was transmitted which desires to represent in that market American exporters of this product.
- No. 5530. Paper-perforating machines.**—A firm of importers and exporters in New York transmits to the Bureau of Manufactures a request from a firm in Brazil which desires to communicate with American manufacturers of machines for perforating paper rolls for piano players. The New York firm would finance the orders.
- No. 5531. Electric plants.**—American Minister Nicolay A. Grevstad, of Uruguay, reports that, anticipating prompt action by the legislature of that country regarding the establishment of a State electric monopoly, the Minister of Finance has requested the board of directors of the Electric Works of Montevideo to prepare without delay complete plans for electric plants in all the cities and important villages in the Republic. When these plans are completed bids for the construction of the plants will be solicited.

Armor-plate trust.—The British Admiralty is investigating the claim that a "ring" exists among certain armor-plate manufacturers of the United Kingdom, it being alleged that existing price arrangements in the industry amount virtually to a "trust."

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CANTON SILK TRADE.

[From Deputy Consul General Hamilton Butler, Canton, China.]

The pessimistic predictions which have been heard in recent years in regard to the export trade in Canton silks received further support in 1911. Last year was unsatisfactory to exporters and disastrous for the filature men. The latter, who were required to pay high prices for their cocoons, were hindered in their operations by the unsettled conditions throughout the greater part of the year. It is said that at least half of the two hundred and odd filatures in the Canton silk district were closed by the end of the year, and that many of them have gone into bankruptcy and will not reopen.

This condition has been brought about to some extent by a state of lawlessness, affecting the security of cocoons in transit and the safety of the workers in the filatures, but it was also furthered by the lack of organization among the filature men as opposed to the well-organized cocoon men. The latter held out for high prices at the cocoon auctions, while the former engaged in competitive bidding which ended in their having to pay absurd prices for raw material.

A Fluctuating Market.

A season of poor crops added the last straw to bring disaster to the filature owners. The seven crops harvested in 1911 netted only 36,500 bales against 45,000 bales in 1910 and 37,500 bales in 1909; while the shutting down of many filatures and the restricted operations of others diminished the output of waste silk.

As predicted at the close of 1910, the market opened strong, with the dealers demanding, in some instances, \$50 per bale more than at the opening of 1910. The new season's crops, both in this district and in Japan, were still conjectural. Despite the high prices asked, a number of orders were executed for European buyers, and in February American buyers came forward with a considerable demand for

coarser sizes. By this time it had become apparent that weather conditions were favorable to the growing of mulberry leaves, and large orders came in from the Continent, also for coarse sizes.

At the end of March all old stock except a few thousand bales had been sold. As the quality of the first crop was promising and the early crops were expected to be large, the dealers, with a view to influencing the price of cocoons in the interior, closed contracts at low prices; but a period of heavy rains in May reduced the second crop to about one-half the estimated amount, and sent prices up again. The result was that buyers on the Continent rushed into the market to cover their requirements in finer sizes, and the dealers, supported by these orders and by the high cost of spinning the inferior cocoons, maintained their position.

Exports and Prices.

The quality of the third and fourth crop of cocoons was fairly satisfactory, demand continued steady, and prices gradually rose during the summer. Some speculative orders were received for 22/26 short reel, which were fully covered during the summer but which led certain filatures to an overproduction in this size and left the market at the close of the year with heavy stocks on hand.

The demand from Lyon continued very satisfactory during the summer, until conditions in Europe made Continental buyers cautious, and local dealers were at last forced to lower their quotations to interest buyers. The total exports of raw silk from Canton, for the calendar year 1911, amounted to 43,100 bales, in contrast with 54,121 bales in 1910. American purchases aggregated \$4,203,026 against \$5,454,593 in 1910.

There was a reversion from the 22/26 vogue of 1910, in the American market, to the now recognized American staple, 14/16 short reel or "4-corner." The prices for No. 1, 14/16 short reel ranged higher as a rule during 1911 than in the preceding year, opening at approximately \$395 and closing at about \$334 a bale. The highest price reached was on February 2, 1911, when \$409 was quoted.

Waste Silk and Piece Goods.

The waste silk market was interfered with by a reduction of output due to the closing of filatures, and prices ruled slightly higher than in 1910. Superior selected opened steam filature waste, the grade most in demand in the United States, averaged about \$57 per picul (133½ pounds). The United States took during the year waste to the value of \$424,816, as against \$351,632 in 1910.

When the figures for the total exportation of silk piece goods are published they will undoubtedly show a considerable falling off as compared with 1910. The value of piece goods exported from Canton to the United States alone declined from \$24,547 in 1910 to \$19,634 in 1911. The production of this commodity was interfered with during the year by unsettled conditions in the manufacturing centers and by the high prices of raw materials.

The feature of the year was the threatened abandonment on a large scale of the native silk gowns for foreign style clothing, and the energetic campaign carried on by the piece-goods dealers to induce the Chinese to retain their native dress and patronize home industry.

AMERICAN PRODUCTION AND IMPORTATION OF SILK GOODS.

[From data supplied by the Bureau of the Census and the Bureau of Statistics.]

There was a rapid, healthy growth of the silk industry of the United States during the decennial period covered by the census of 1909, the gain in the value of the output exceeding the rise in the cost of materials used. This fact is shown by the following table, which presents statistics for the manufacture of silk and silk goods and includes data for establishments that make a specialty of throwing and winding silk:

	1899	1909		1899	1909
MATERIALS.			PRODUCTS—continued.		
Silk:			Broad silks—Contd.		
Raw—			Jacquard—Contd.		
Pounds.....	9,780,770	17,472,204	Silk mixed—		
Cost.....	\$40,721,877	\$67,787,037	Yards.....	1,677,466	6,043,686
Spun—			Value.....	\$1,260,321	\$3,473,799
Pounds.....	1,550,291	2,212,972	Piece-dyed—		
Cost.....	\$3,406,069	\$4,848,789	All silk—		
Artificial—			Yards.....	7,331,501	19,693,393
Pounds.....	6,066	914,404	Value.....	\$3,342,167	\$11,353,242
Cost.....	\$10,380	\$1,926,894	Silk mixed—		
Organzine and tram,			Yards.....	8,568,884	40,044,433
purchased—			Value.....	\$2,868,506	\$15,728,195
Pounds.....	2,338,464	3,377,972	Velvets:		
Cost.....	\$10,539,632	\$14,679,719	Yards.....	5,122,249	10,068,583
Fringe and floss,			Value.....	\$2,479,903	\$4,767,990
including waste,			Plushes:		
nots, etc., pur-			Yards.....	3,848,684	2,759,411
chased—			Value.....	\$2,480,068	\$2,101,708
Pounds.....	1,735,179	2,402,960	Tapestries and uphol-		
Cost.....	\$1,006,947	\$1,637,187	stery:		
Yarns, other than silk:			Yards.....	1,333,119	226,717
Cotton, including			Value.....	\$1,009,835	\$382,820
mercerized—			Ribbons, value.....	\$18,467,179	\$32,744,873
Pounds.....	6,664,069	14,111,878	Laces, nets, veils, veil-		
Cost.....	\$1,996,233	\$5,811,562	ing, etc., value.....	\$808,104	\$1,350,850
Woolen or worsted			Embroideries, value.....	\$57,625	\$485,322
Pounds.....	239,461	610,568	Fringes and gimps,		
Cost.....	\$167,770	\$765,989	value.....	\$444,787	\$624,527
Mohair—			Brads and bindings,		
Pounds.....	104,810	710,108	value.....	\$1,522,565	\$4,483,248
Cost.....	\$107,365	\$640,529	Trimmings, value.....	\$2,034,076	\$3,850,448
All other —			Machine twist:		
Pounds.....	108,368	353,780	Pounds.....	967,917	1,088,780
Cost.....	\$134,966	\$456,597	Value.....	\$5,997,974	\$6,341,719
Chemicals and dye-			Sewing, embroidery,		
stuffs, cost.....	(1)	\$1,062,313	wash, fringe, and floss		
All other materials, cost.....	\$4,313,416	\$8,150,280	silks:		
Total cost.....	\$62,406,665	\$107,766,916	Pounds.....	739,301	747,246
PRODUCTS.			Value.....	\$4,248,216	\$4,179,355
Broad silks:			Organzine and tram, for		
Yards.....	87,636,883	185,707,316	sale:		
Value.....	\$52,152,816	\$107,881,146	Pounds.....	2,468,397	2,740,319
Plain and fancies—			Value.....	\$11,167,191	\$12,550,510
All silk—			Spun silk, for sale:		
Yards.....	53,573,488	81,934,158	Pounds.....	437,459	779,462
Value.....	\$33,852,111	\$63,282,704	Value.....	\$1,026,227	\$2,104,006
Silk mixed—			All other products,		
Yards.....	8,963,315	24,742,556	value.....	\$1,027,472	\$4,495,675
Value.....	\$5,450,710	\$14,207,861	Work done on materials		
Jacquard—			for others.....	\$2,337,220	\$8,364,350
All silk—			Total value.....	\$107,266,258	\$196,911,667
Yards.....	7,532,229	13,249,090			
Value.....	\$5,379,091	\$9,835,345			

(1) Not reported separately.

² In addition, silk and silk goods to the value of \$1,218,101 were made by establishments engaged primarily in the manufacture of products other than those covered by the industry designation.

The increase in the cost of materials and in the value of products for the period 1899–1909 was 72.7 and 83.6 per cent, respectively. The total production of broad weaves in 1909 was 198,787,027 run-

ning yards, single width, valued at \$115,136,724, compared with 97,940,935 yards, valued at \$58,122,622, in 1899, the increase in quantity being 103 per cent and that in value 98.1 per cent. Broad silks formed over nine-tenths of all broad weaves in 1909, the increase in the output between 1899 and 1909 being 111.9 per cent. The increase in the output of all other broad weaves combined—velvets, plushes, tapestries, and upholsteries—was only 26.9 per cent.

In 1899 all-silk goods constituted 78.1 per cent of the broad-silk product, and silk-mixed goods 21.9 per cent, whereas in 1909 the proportion for the latter had risen to 38.1 per cent and that for the former had fallen to 61.9 per cent. The change was due to an increase during the decade of 268.9 per cent in the output of silk-mixed broad silks, while that for all-silk was only 67.9 per cent.

Foreign Trade in Silk and Silk Products.

The foreign trade of the United States in silk and silk products for the calendar year 1909 (the last covered by the Census figures) consisted of: Exports of silk manufactures, \$967,231; imports, raw silk in skeins, \$74,060,605; waste, \$1,451,796; manufactures, \$32,707,982. Later statistics, given in detail for the fiscal years ended June 30, 1910 and 1911, show the origin of American imports of silk and silk products:

Articles and countries.	1910	1911	Articles and countries.	1910	1911
UNMANUFACTURED.			MANUFACTURES—contd.		
Cocoons:			Bandings, beltings, blindings, etc., not over 12 inches wide:		
Canada.....		\$74,178	France.....	\$7,321	\$12,851
China.....	\$14,154		Germany.....	667,503	550,238
All other.....	272	83	Italy.....	13,234	16,972
Total.....	14,426	74,261	United Kingdom.....	1,726	16,322
Raw, in skeins reeled from the cocoon or reeled:			All other.....	762	2,477
Belgium.....	20,230		Total.....	680,546	598,860
France.....	1,612,148	991,470	Bolting cloths:		
Germany.....	11,488	8,924	Switzerland.....	248,128	235,094
Italy.....	13,268,689	10,057,393	All other.....	4,504	2,689
United Kingdom.....	2,123	23,525	Total.....	252,632	237,783
Canada.....	709,548	706,810	Clothing and other wearing apparel:		
China.....	9,675,898	13,606,732	Austria-Hungary.....	45,626	12,191
British India.....	15,806	1,671	Belgium.....	25,620	25,582
Japan.....	40,103,789	47,248,347	France.....	2,501,543	2,769,147
All other.....	5,074	7,112	Germany.....	1,098,221	1,040,384
Total.....	65,424,784	72,713,984	Italy.....	31,891	44,315
Waste:			Netherlands.....	14,357	54,586
France.....	998,100	1,022,436	Switzerland.....	100,060	95,125
Germany.....	200	12,511	United Kingdom.....	743,382	1,098,542
Italy.....	106,482	206,630	Canada.....	8,861	19,346
Switzerland.....	8,367	16,651	China.....	56,653	65,695
United Kingdom.....	84,816	158,441	Hongkong.....	28,158	39,280
Canada.....	190,020	313,059	Japan.....	227,003	313,354
China.....	252,565	390,626	All other.....	14,020	20,368
Japan.....	44,429	88,102	Total.....	4,896,505	5,507,915
All other.....	5,414	1,474	Dress and piece goods:¹		
Total.....	1,690,393	2,210,020	Austria-Hungary.....	52,706	
MANUFACTURES.			France.....	4,792,272	
Artificial silk:¹			Germany.....	500,113	
Austria-Hungary.....		274,566	Italy.....	290,717	
Belgium.....		200,744	Switzerland.....	1,642,677	
France.....		314,659	United Kingdom.....	155,786	
Germany.....		1,351,416	China.....	209,431	
Italy.....		35,528	Japan.....	2,044,402	
Switzerland.....		225,155	All other.....	20,881	
United Kingdom.....		877,412	Total.....	9,008,965	
All other.....		79			
Total.....		3,279,559			

¹ Included in "All other manufactures of" prior to 1911.

² Stated separately as "Dress and piece goods, dyed in the thread or yarn" and "All other dress and piece goods" after 1910.

Articles and countries.	1910	1911	Articles and countries.	1910	1911
MANUFACTURES—contd.			MANUFACTURES—contd.		
Dress and piece goods, dyed in the thread or yarn: ¹			Ribbon, not over 12 inches wide—Con.		
Austria-Hungary.....		\$60,256	Switzerland.....	\$384,191	\$258,901
France.....		753,979	All other.....	10,560	9,807
Germany.....		315,681	Total.....	996,969	685,585
Italy.....		150,070			
Switzerland.....		992,919	Spun silk, or schappe silk yarn:		
United Kingdom.....		84,150	Belgium.....	4,267	30,789
Japan.....		114,550	France.....	1,272,253	1,279,028
All other.....		6,808	Germany.....	1,294,063	1,275,538
Total.....		2,478,413	Italy.....	362,244	472,433
All other dress and piece goods: ¹			Switzerland.....	885,332	1,322,854
France.....		4,287,092	United Kingdom.....	1,232,870	1,323,116
Germany.....		81,927	All other.....	12,962	5,046
Italy.....		57,152	Total.....	5,064,111	5,708,804
Switzerland.....		118,903			
United Kingdom.....		92,886	Velvets, plushes, and other pile fabrics:		
China.....		104,947	France.....	1,698,516	1,257,669
Japan.....		1,896,198	Germany.....	331,828	733,280
All other.....		16,027	Switzerland.....	282,721	143,319
Total.....		6,654,932	United Kingdom.....	17,069	38,002
			All other.....	1,614	2,187
Laces and embroideries:			Total.....	2,331,748	2,174,437
Belgium.....	\$25,772	10,905			
France.....	3,692,019	2,779,820	All other manufactures of silk:		
Germany.....	739,296	193,716	Austria-Hungary.....	261,737	4,199
Italy.....	8,138	12,167	Belgium.....	137,307	876
Switzerland.....	99,849	21,339	France.....	629,794	264,612
United Kingdom.....	412,638	226,088	Germany.....	1,482,809	191,264
China.....	71,205	95,886	Italy.....	112,946	12,587
Hongkong.....	15,179	37,424	Switzerland.....	119,062	17,254
Japan.....	198,007	262,954	United Kingdom.....	643,067	119,203
All other.....	25,831	18,849	Japan.....	382,532	404,991
Total.....	5,287,934	3,679,748	All other.....	19,645	26,815
			Total.....	3,788,939	1,041,801
Ribbon, not over 12 inches wide:			Grand total.....	100,018,062	107,136,102
France.....	437,797	339,321			
Germany.....	134,421	77,556			

¹ Included in "Dress and piece goods" prior to 1911.

Exports of silk goods of domestic manufacture from the United States were valued in the fiscal year 1910 at \$1,097,593, and in 1911 at \$1,538,543, in which latter year the shipments were apportioned: Europe (chiefly England), \$241,632; North America (mainly Canada, Cuba, Mexico, and Panama, in the order named), \$1,182,873; South America, \$25,207; Asia, \$11,294; Oceania, \$74,308; and Africa, \$3,229. Silk waste was also shipped by the United States, to the value of \$64,528 in the fiscal year 1910 and \$30,863 in 1911, mainly to Germany and France in the latter year.

DUTCH SHIPPING COMBINATION.

[Amsterdam correspondence in Frankfurter Zeitung.]

The Nederlandsche Scheepvaart Unie proposes to make an extensive increase in its share capital from 16,500,000 florins to 50,250,000 florins (\$6,633,000 to \$20,200,500). The Union Co. was originally formed to protect Dutch shipping companies from the competition of the large German shipping companies. The Union forms the connecting link between the three companies interested in the Indian trade, namely, the Nederland, the Rotterdam Lloyd, and the Koninklijke Paketvaart, and it possesses a portion of the share capital in each and is jointly managed by them. The projected large increase in the share capital probably points to plans for the complete absorption of the three companies by the Union, although no definite statement on the matter is so far available.

TUSCAN STRAW BRAID AND HAT INDUSTRY.

[From Consul L. J. Keena, Florence.]

The manufacture of straw hats and hat braids has been a flourishing industry in the Province of Florence for more than a century.

At present over 90,000 workers are employed in making, gathering, sorting, and shipping the several million dollars' worth of these goods annually exported from this district. To the United States alone the declared exports during the past three years have been valued as follows: 1909, \$1,452,920; 1910, \$1,203,205; 1911, \$1,150,911.

In the Province of Florence are upward of 100 factories devoted to braid work and more than 30 making trimmed and untrimmed hats. Only some 4,000 persons are regularly employed in these 130 factories. The outside workers are listed under two headings, which refer only to their manner of living: 65,000 are "pigionali," i. e., live in rented houses, usually near some factory, and 19,000 are "coloni," i. e., tenants of small farms worked on shares. More than 56,000 women and 26,000 girls under age are engaged in straw work. They work for the most part at home, and the making of hat braid is, in the case of coloni, done in addition to the usual work of the day.

Agents—Leghorn Hats.

This work is directed and ordered by agents of local factories or by exporters of straw braids. There are about 1,000 of these agents, known by the general name of "fattorini." Braid work is paid for by the piece of 9 to 10 meters (meter=1.0936 yards). Orders for work, and samples if necessary, are taken from the factories or exporters by the fattorini and delivered to the outside workers. The fattorini also see to the completing of these orders according to the instruction or sample given.

The most important branch of the local straw industry is the working of "paglia Fiorentina" or "nostrale," from which the famous "Leghorn" hats are made. The braid used in Leghorn hats is composed of 13 threads. The following are some of the ordinary sizes and prices of hats made with this braid:

Diameter.	Girl.	Price.
		<i>Lira.</i>
45 centimeters (centimeter=0.3937 inch).....	30	2.20
50 centimeters.....	33	2.40
55 centimeters.....	36	2.70
60 centimeters.....	40	3.00

By "giri" is meant the number of widths of braid wound in forming the hat. Each additional giro laid on the hat increases the price 0.10 to 0.25 Italian lira (lira=19.3 cents) per width, according to the size of the hat.

Paglia Nostrale.

The manufacture of hats from paglia nostrale is essentially a Florentine industry and one in which there is no competition abroad. It is customary to order these hats by the number of giri or widths of braid to be used. The person making the braid then winds and sews the widths until the requisite number of giri has been reached. Thirteen-thread nostrale braid is therefore not usually sold by the piece but by the hat or length necessary to complete a hat having a stated number of giri. The local prices of these hats range from 2.20 to 5 Italian lire.

Ordinarily Leghorn hats are sold in the natural color, which is a light yellow. Some also are bleached by a process of washing, followed by six or seven weeks' exposure to the sun. The bleaching process for Leghorn hats costs about 0.15 to 0.20 Italian lira per hat. Manila hats are frequently sent into this district to be bleached and reshipped. The cost of bleaching hats of this kind is 0.55 to 0.60 lira each.

Paglia nostrale is also made to some extent in braids of 5 and 7 threads. These lighter braids are used in the manufacture of broad-brimmed hats for women. The 7-thread type of nostrale is sold by the piece of 42 to 45 meters. It is called "pedale" or "Milan braid," and costs from 1 to 2.50 lire per piece, according to the quality and fineness of the straw thread. The 5-thread braid is sold in pieces of 36 to 40 meters and is priced at 0.60 to 1 lira. These prices are for pieces in the natural color; the cost of bleaching would be 0.15 to 0.20 lira.

Punta and Truciolo.

In the Emilian Mountains a straw different in type and finish from the Florentine is very largely worked. The hats of this straw in and around Bologna and the neighboring villages of Monghidoro, Monzani, Lojano, Monteruggio, Filigare, etc., are called "punta," to distinguish them in the trade from the Florentine "nostrale" hats. This straw is plentiful in the Emilian Mountains and is much rougher and coarser than the Florentine straw. Hand labor in this region is particularly cheap and the price of these "punta" is consequently very low, a fair average being 1.10 to 1.20 lire for finished hats of 45, 50, 55, or 60 centimeters diameter. In general, only 20 giri are used in making either the 45 or the 60 centimeter hat; in the latter a coarser braid is employed.

Formerly punta hats were exported in their rough form, but of recent years they have been forwarded to the Florence district to be properly finished for the market. The finishing process renders them more salable, though it increases the cost of each hat 0.20 to 0.25 lira. There is a steady demand for these hats in England and America.

Another important straw worked in this district is called "truciolo." It is a woody product, not native to this district, but grown in Russia and made into threads of various sizes in Bohemia. Locally the truciolo is plaited into different types of braid. As there is no standard style, it is impossible to make any statement of cost per piece. The braid is sold by the meter in lengths ranging from 9 to 80 meters. A quintal (220.46 pounds) of truciolo will make 3,600 meters of plain braid of a width of 10 millimeters (millimeter = 0.03937 inch). Only women's hats are made from this class of braid, which is largely sold colored.

Japon Braid.

Another foreign straw worked here is "japon." It is made up in pieces 9 to 10 meters in length, costing 0.70 to 2 Italian lire. Work in this straw is ordinarily limited to braids, but some few exporters make up a considerable number of fancy hats for women in accordance with the fashion of the moment, in order to take advantage of the cheap hand labor in this district.

[An article on the straw-braid industry in the vicinity of Bologna was published in Daily Consular and Trade Reports on July 14, 1908.]

MOTOR BOATS FOR CHINESE WATERWAYS.

[From Consul C. L. L. Williams, Swatow.]

Two motor boats arrived in Swatow at the end of January for measurement and certification under inland water regulations by the Chinese customs authorities, being certified to carry 90 passengers each. These boats will ply as passenger launches between the cities of Chaoyang and Kueisu. A part of the 30-mile journey is through the Bay of Haimun, just south of this port, but the most of it is up a small river on the banks of which stands Kueisu. Chaoyang is already connected with this port by a steam-launch service.

These launches are along the lines indicated in my previous reports, published by the Bureau of Manufactures, their dimensions being, length 63 feet, beam 14 feet, draft 18 inches, depth of hull about 4 feet. The hull is completely covered by a superstructure about 4 feet high, with the exception of a short deck forward, where there is a hand winch for handling the anchor. Being designed solely for passenger traffic, there are no cargo hatches. The long cabin formed by the superstructure and the hull is divided by transverse bulkheads into four main compartments, one for the engines and the other three for passengers, who enter the saloons by side doors, communication from one compartment to another being by a grating gangway carried alongside the vessel.

The Propelling Equipment.

The engine compartment amidships has no outside entrance, being entered from the after saloon through the chief engineer's cabin, which occupies some 10 by 3 feet on the port side of the engine room. On the starboard side is a similar cabin, but opening outside and not into the engine room. Thus the engines are effectively protected from rough weather.

The hull is of teak wood throughout. It is cut square at the stern and is cut away down the middle aft of the engine room to form a tunnel, in which the propeller works. A pair of rudders are fitted one on each side of the propeller tunnel. This form of hull is, I believe, in common use in the United States where launches are run in very shallow water.

The engines are Bolinder's (Stockholm, Sweden) patent 2-cylinder 50-horsepower direct reversible type, burning crude oil. They are capable of giving these craft a speed of something over 9 knots per hour. The exhaust is through a funnel, which also helps ventilate the engineroom. A compressed air whistle is provided.

These craft were built and the engines installed by Ulderup & Schluter, in Hongkong, at a cost of about \$6,000 gold each, including \$3,150 for engine.

The engines are said to consume 15 to 17 cents (gold) worth of oil per hour when running at full speed, or, say, \$1.58 per working day. For crew the monthly wages bill is about \$56 each, the crew consisting of one chief engineer, at \$13.50; one second engineer, at \$11.25; and a crew of seven or eight deckhands, ticket collectors, etc., at \$3.60 to \$4.50 each.

Fittings and Decks.

The bridge is at the forward end of the superstructure, the entrance to it being through the forward saloon. To avoid undue height above

the water line, it is not decked over. The forward deck, about 5 feet in length, is carried to a square end, to facilitate landing on the banks at way stations.

These boats, drawing only 18 inches, are adapted for very shallow waters. Their maximum height of about 5½ feet above the water line enables them to clear easily the numerous bridges on the smaller rivers and canals in China.

Chinese being unaccustomed to the luxuries of travel demanded in the Occident, fittings are conspicuous by their absence. Each saloon has benches built along the sides and ends, and a table in the middle. Two toilets are located right aft.

Great Advantages of this Type.

As compared with steam launches, it would be possible to purchase for the price paid for these boats only a very small launch, with no greater passenger capacity, drawing at least 3 feet, and considerably more expensive to operate. The steam launches running to Chaoyang cost approximately the same as these motor boats and carry about the same number of passengers, but burn at least 1 ton of coal a day—fuel, \$5.40—and carry a much larger and proportionately expensive crew.

Despite the fact that these boats were built for use in shallow waters, they came up from Hongkong under their own power, 185 miles of open sea, in very rough weather.

These are the first motor launches to be used commercially in this vicinity, and if successful, as there seems good reason to believe they should be, should prove the forerunners of many more. It is expected that motor launches for use on the Han River above Chaochowfu, as previously reported by me, will arrive from Hongkong shortly.

As pointed out in previous reports, it is the launch builders in Hongkong that the American manufacturers of marine motor engines must approach if they wish to compete in this market. There are no launch builders in this port, and the Chinese who purchase motor boats are absolutely unacquainted with the technical points involved in the consideration of motor engines. To this is attributable the fact that catalogues are of but little use.

A rough sketch of these launches is forwarded to show more plainly their arrangement. [The sketch will be loaned by the Bureau of Manufactures.]

PANAMA-CALIFORNIA SERVICE.

[From Consul General Alban G. Snyder, Panama City.]

From March 6 at this end and from March 15 from San Francisco the steamers of the Pacific Mail call at Los Angeles on both north and south bound voyages, and the trip is to be made in from 13 to 14 days. The steamers *Peru* and *City of Para* in this service will carry first-class passengers only, while the *Aztec* will carry no passengers.

Lead production in the United States last year reached 1 billion pounds, an increase of 40 million pounds over 1910. Imports last year were 180 million pounds, a decrease of 37 million pounds.

SUGAR MACHINERY AND AMERICAN GOODS IN PERU.

[From Vice Consul General Charles Lyon Chandler, Callao.]

During the calendar years 1910 and 1911 between \$100,000 and \$150,000 was spent on new sugar machinery in the Peruvian Department of Lambayeque, this being the most conservative estimate that the writer can make after many personal inquiries. Fully 85 per cent of this went to Fawcett, Preston & Co., of Liverpool, McOnie, Harvey & Co., of Glasgow, and other firms in the United Kingdom.

In November, 1911, a representative of the Honolulu Iron Works began a personal, aggressive campaign, visiting sugar estates and exhaustively studying the situation. The writer was informed by at least three different people that this was the first time a United States firm engaged in making sugar machinery had sent a special representative to Peru. The campaign proved successful, and this would seem to be the only logical way to get this business.

American Plows and other Implements.

A study of the different articles in use on the estate of Señor Don Antaro Áspillaga showed several American articles among them. The three American disk plows were sold by Señor Don Manuel Alvarez Calderon, a graduate of the Maryland Agricultural College. As was pointed out by Mr. Charles M. Pepper, in his report on trade conditions, especially agricultural machinery, in Peru [see Daily Consular and Trade Reports for Feb. 1, 1908], the 11 young Peruvians who have studied at agricultural colleges in the United States have done much to spread the knowledge and sale of American goods. Complaint was heard of the lightness of these disk plows for hard use on very difficult soil.

All sugar-grinding machinery was from Fawcett, Preston & Co., of Liverpool. Some of it was installed in 1878 and is still useful. The traction engines were from John Fowler, England. The Edwards centripetal drying machine came from the United States, and gives satisfaction. The boilers were Babcock & Wilcox. Two pumps of the Worthington Pump Co. (Ltd.), London, were installed in 1911. Zorritos oil is used exclusively in the sugar mill. The small tank cars for sugar while in a liquid state came from the United States. A steam engine from the Delamater Iron Works, Pennsylvania, has been in use for many years. The boiler compound of S. E. Heymann & Co., New York City, was exclusively used. At least \$500 worth of ax handles from Turner, Day & Woolworth, of Louisville, Ky., was noticed. Nicholson files, from Providence, R. I., were seen in the repair shop. Oregon white pine was strongly in evidence, and all nails and screws came from the United States. Charles Booth & Co., of Liverpool, supplied a steam hammer and lathes; Sharp, Stewart & Co., of Manchester, a screwing machine. The turning lathe of W. Collier, Salford, England, had been continuously used since 1870.

A Prosperous Season—Trade Literature Wanted.

The past season would seem to have been a very good one for the sugar industry, and its extension is expected with the opening of the Panama Canal. The promoters of the railway from Chiclayo to Pimentel state that they expect to have it completed when the Panama Canal is finished.

During 1911 several American traveling salesmen visited Chiclayo, the most important city and distributing center in the Department of

Lambayeque, and secured good orders there. The Chamber of Commerce of Chiclayo (address, Camara de Comercio, Chiclayo, Peru) would be glad to receive American trade literature, catalogues, and advertising matter in Spanish. It will be useless to send it in English. Information relative to agricultural machinery for rice, sugar, and cotton plantations, milling machinery, motor boats, jewelry, clocks and watches, and perfumery and toilet articles is especially desired by this chamber.

TWO TYPES OF FRENCH GAS PRODUCERS.

[From Consul General Frank H. Mason, Paris.]

What is known in Europe as the "S. F. H." gas producer has the form of a small furnace, with walls that converge downward and terminate in a crucible, or retort, which is made of bauxite and has an opening through which the slag is drawn off at intervals, as in a blast furnace. The blast is introduced through tuyères, which enter the furnace near the top of the crucible that forms its base. Intense heat is generated in front of the tuyères and the bauxite retort has to be repaired once in about three months.

Coking coals or other materials that do not expand much under the action of heat are the only fuels used. Good coking coal containing as little dust as possible is regarded as the best material for this process. The fuel used must sink freely in the oven, as the lower portion is consumed and the ash fuses into slag. When the natural ash does not smelt readily the coal is mixed with such fluxing materials as limestone, sand, or granulated scoria. A producer of standard size will gasify $1\frac{1}{2}$ to 2 tons of coal per hour. The six producers in use at Gironcourt are somewhat smaller and use 1,320 pounds of lignite per hour.

The makers of the "S. F. H." producer also manufacture a quite different type of gas producer especially adapted to the use of "fat" or "semifat" coals. It is known as the "double combustion gas producer" and is used with coals that are not workable with the type of producer above described. It has at the bottom a rotary grate, and the interior walls are perpendicular.

[A circular describing the "double combustion producer" may be had from the Bureau of Manufactures.]

Consular Trade Conferences.

Consul Percival Gassett, of Jerez de la Frontera, Spain, advises that he expects to arrive at New York, N. Y., on April 10, 1912, on leave of absence for 60 days. He plans to remain in that city at the Albemarle Hotel four days, then proceeding to Washington, D. C., for a stay of one month, where his address will be the Metropolitan Club. The consul will later be in Boston, Mass., for two weeks, at which place he may be addressed in care of Mr. P. Atherton, St. Botolph Club. Mr. Gassett will be glad to meet any business men who are interested in trade with his district.

Public works in Ontario.—Consul Felix S. S. Johnson sends from Kingston a newspaper list of places in the Province of Ontario for which the Canadian Government has made appropriations for 55 public buildings and additions and 64 harbor and river improvements.

PUBLIC-SCHOOL WORKSHOPS IN SCOTLAND.

[From Consul Rufus Fleming, Edinburgh.]

Owing to the pressure for employment in skilled occupations in Scotland, the apprenticeship system has been gradually disappearing. In periods of normal industrial activity few trades can give employment to all journeymen at the standard wage; and in periods of depression unemployment among journeymen is of course much greater.

As a result of this experience trade unions have sought to regulate the number of apprentices entering the various industries in order to prevent an increase in the ranks of journeymen. They have so far succeeded that the majority of boys find it extremely difficult to enter any trade. Moreover, the indenture system no longer existing, the conditions of apprenticeship depend upon oral agreement only, and as a consequence the limited number of raw apprentices seldom serve their appointed time, going from one factory to another, and perhaps from one occupation to another, not a few of them finally drifting into the casual-labor class.

Night Classes—New Supplementary Schools.

The breaking up of the apprenticeship system has forced upon the public authorities the problem of how to give boys a chance in life by affording them practical instruction in trades. For several years the Edinburgh School Board has provided, in connection with 27 separate public schools with 10,538 pupils, night instruction to classes in stenography, typewriting, and in certain handicrafts—cabinet-making, upholstering, and plumbing. In some of the night classes 98 per cent of the day pupils are in attendance.

A noteworthy development of this educational policy is the recent opening by the board of supplementary schools and large workshops for the trade instruction, where boys will receive thorough training in evening classes at the public expense. The new buildings comprise 10 workshops, equipped with the requisite tools and appliances for the following trade classes: Cabinetmaking, carpentry and joinery, plumbing, tinsmiths' work, engineering, brass finishing, molders' work, pattern making, tailoring, upholstering, French polishing, and plasterwork; and there are also rooms fitted for cookery and laundry work. The site of 3½ acres cost \$37,435, the buildings \$29,200, and the equipment \$9,830.

It is the intention of the board ultimately to give day instruction also during ordinary school hours, allowing boys at the age of 14 to 16 to enter the school workshop and receive instruction for two afternoons a week. At the end of the term there will be available the reports of the teachers and the inspector as to whether or not a boy has any aptitude for the particular craft or trade in which he has been engaged. If the report be favorable, the time devoted to technical instruction will be extended.

Advantages of the Plans.

If convinced of the great advantage of such training, parents, it is believed, will be willing to allow their boys to remain at the school for another year, while they are looking for situations. A member of the school board says:

The advantages are obvious. It is not improbable that a factory master, finding a lad possessed of a certificate which shows his proficiency in the rudiments of his trade,

will recognize that that boy will be of more value to him than the raw boy fresh from school or he who has been running loose for some months. It is not unlikely that the technical-school apprentice may start his career in the shop with a higher wage than is given to the first year's apprentice to-day and with an equally important concession—a reduction in the time to be served. In that way the parents, the boy, and the master will be benefited, and a great step will be taken toward the solution of a problem which is giving anxiety to educationists everywhere—how to bridge over the gap between the time of leaving school and the day when a suitable situation presents itself.

MAIL-ORDER POSSIBILITIES IN ECUADOR.

[From Commercial Agent Frank R. Rutter.]

It is the opinion of Consular Agent George D. Hedican, Esmeraldas, Ecuador, that a profitable American mail-order business could be worked up in his locality if the postal service were improved. All that is needed is an arrangement whereby mail pouches for Esmeraldas, and also for Bahia de Caraquez and Manta, should be made up separately from those destined to Guayaquil. At present all mail for Ecuador is shipped to Guayaquil, and from there distributed to the various post offices; mail for the coast towns instead of being landed in the voyage south from Panama must lose four days in the journey to Guayaquil, wait there perhaps a week, and then journey back to Esmeraldas. Practically twice the necessary time in transit is thus consumed.

Each of the three towns of Esmeraldas, Bahia, and Manta purveys to a considerable population, both in the towns themselves and in the surrounding country; they are remote from the markets and have communication with Guayaquil and Panama only by steamer; and if the postal service between them and the United States were improved they would deserve more attention from the mail-order houses of the United States.

EXPENSES OF CITY SCHOOLS.

Compare the cost of a city's police force with the cost of its school system and you have one indication of that municipality's interest in education, according to Dr. Harlan Updegraff. Dr. Updegraff is specialist in school administration of the United States Bureau of Education, which has just published for free distribution a monograph (*A Study of Expenses of City Schools*) containing the results of his investigations. Of 13 cities with 300,000 population or more 26 per cent of total revenues are spent on public schools; 20 cities with 100,000 to 300,000 population spent about 33½ per cent of the income on its schools, 42 cities with 50,000 to 100,000 population spent 36.5 per cent, while 28 cities with 30,000 to 50,000 people spent 38 per cent of all receipts on education.

Foreign Trade of Italy.

Consul General James A. Smith, of Genoa, reports that for the first two months of 1912 Italy's exports totaled \$67,875,577, an increase of \$5,421,772 over January and February, 1911. Imports amounted to \$101,296,081, a decrease of \$7,078,143.

Ontario Province was granted \$2,000,000 by the Canadian Parliament as subsidy for the Temiskaming & Northern Ontario Railway.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8532. Sugar-bag sewing machine.**—An American consul in South Africa forwarded the name of a firm in his district which desires to procure a first-class machine for sewing sugar bags. If the right kind of a machine can be found the firm will be glad to represent the manufacturer in British and Portuguese South Africa.
- No. 8533. Typewriters, adding machines, etc.**—A business man in Manchuria informs an American consul that he desires catalogues and price lists of American typewriters, adding machines, addressers, and duplicators. The applicant states that in purchasing from European houses he pays 10 per cent with the order and the balance against documents at a Manchurian bank.
- No. 8534. Walnut and beech wood.**—An American consul in Greece reports to the Bureau of Manufactures that a firm in his district desires to be placed in touch with exporters of American walnut and beech woods for use in furniture making, with a view to establishing business relations.
- No. 8535. Barber chairs.**—An American consul in the Far East requests that catalogues and prices, with discounts and shipping weights, of American barber chairs be sent to that consulate. The consul states that only the cheapest grades can be sold, as their introduction would be in the nature of an experiment.
- No. 8536. Portland cement.**—A firm in Russia requested an American consular officer to place it in touch with manufacturers of Portland cement in the United States who desire to get into that market. Prices, c. i. f. a certain port, and how soon deliveries could be made should be stated.
- No. 8537. Silk piece goods.**—An American consul in Greece forwards the name of a firm in his district which desires to be placed in touch with American exporters of silk piece goods with a view to establish business relations. Samples, with prices and terms c. i. f. a certain port, are desired.
- No. 8538. Dry goods specialties.**—A firm in England requested an American consular officer to place it in communication with American manufacturers of dry goods specialties suitable for British and colonial trade, with a view to securing agencies. This firm has a New York house which, it states, would settle for all purchases.
- No. 8539. Office furniture.**—An American consul in the Far East forwarded to the Bureau of Manufactures the name of a company which wishes catalogues, with prices and discounts, gross and net shipping weights, of wood and steel office furniture, particularly filing devices. Correspondence may be in English.
- No. 8540. American goods for China.**—A business man applied at an American consulate in England for the addresses of American manufacturers and exporters of machinery of all kinds, railway materials, firearms, lumber, piece goods, and provisions, with a view to securing representation for them in China. He states that he was 15 years in the East, and was until lately manager of a firm in Shanghai, with branches in Vienna, Hamburg, Milan, Lyon, and Manchester. References will be furnished.
- No. 8541. Electrical manicure machines.**—An American consular officer in Austria forwards the name of a dealer favorably recommended who wishes to obtain catalogues from manufacturers of electrical manicure machines in the United States with a view to securing the agency for them.
- No. 8542. Construction of pipe line.**—American Minister to Roumania, John B. Jackson, telegraphed from Bucharest that a law has been passed authorizing the construction of a pipe line for carrying petroleum from Prahova, in the center of Roumania, to Constantza, on the Black Sea. The line is to be constructed by the Government railway authorities, and \$3,600,000 has been appropriated for the purpose. The plan proposed is to construct two parallel conduits, one for the "residus" and the other for the "lampant." The length of the line will be 150 to 200 miles. Inquiries regarding bids for furnishing materials should be addressed to the Department of Public Works, Bucharest, Roumania.

- No. 8543. Clothing.**—An American consul in Asia Minor reports that a local importer desires to hear from American manufacturers of cheap ready-made clothing and from dealers of secondhand clothing, as there is a good market for the sale of such goods in that district. Correspondence in English or French.
- No. 8544. Staves.**—A cooper in Wales requested an American consul to put him in touch with American firms which could supply white-oak barrel staves, ready jointed, 32 inches long, 4 inches wide, and $\frac{7}{8}$ inch thick, in quantities of 10 to 20 standards at a time. Shipments could be made direct.
- No. 8545. Building equipments.**—An American consul in Turkey reports that a large new building is being constructed in his district for hotel and business purposes and that tenders for equipment should be forwarded to the person whose name is on file in the Bureau of Manufactures.
- No. 8546. Corn oil.**—An American consular officer in Sweden forwarded to the Bureau of Manufactures the name of a well-known firm in his district which desires to represent American exporters of corn oil.
- No. 8547. Furniture.**—A prominent importer in Asia Minor requested an American consul to put him in touch with American manufacturers of furniture. Catalogues and price lists, in English or French, are desired.
- No. 8548. Gasoline and naphtha motors.**—An American consul in Austria reports that the sales of gasoline and naphtha motors are rapidly increasing in that country and that several hundred American makes were sold last year. The consul forwarded the name of a person who wishes to be placed in communication with manufacturers of motors in the United States.
- No. 8549. White Portland cement.**—A firm in Germany which manufactures gypsum requested an American consul to place it in communication with manufacturers of white Portland cement in the United States with a view to importing same.
- No. 8550. Cotton yarn.**—An American consul in South America reports that a new cotton-goods factory will begin operations this month and that the firm is anxious to receive samples and prices of American cotton yarn (warp and wool) for spinning or weaving cotton drills, etc. The consul forwarded the name of another firm which desires to get in touch with American manufacturers of yarn. These factories will be large importers if samples and prices are satisfactory.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 576. Steel forgings.**—Sealed proposals, in duplicate, will be received at the office of the Chief of Ordnance, United States Army, Washington, D. C., until April 17, 1912, for furnishing and delivering, f. o. b. contractor's works, 12 sets (except trunnion hoops), more or less, of steel forgings for 12-inch mortar, model of 1912, to be tempered and annealed and of American manufacture, in accordance with specifications prescribed by the Ordnance Department.
- No. 577. Erection of filtration plant.**—Sealed proposals, in triplicate, will be received by the commanding officer, Rock Island Arsenal, Ill., until April 26, 1912, for the erection of a filtration plant at the said arsenal. Specifications, with plans, etc., may be had upon application to the commanding officer.
- No. 578. Stern-wheel gasoline boat.**—Sealed proposals for constructing and delivering stern-wheel gasoline boat *Grantville* will be received at the United States Engineer Office, Wheeling, W. Va., until April 30, 1912. Information on application to F. W. Altstaetter, Major, Engineers.

Fruit Tree Values in Bavaria.

The Bavarian Government has given much attention to fruit growing, a decree having been issued as early as 1769 requiring all land owners to plant fruit trees along the public highways bordering their estates. The systematic planting of such trees was begun about the middle of the last century. The value of fruit trees in Bavaria is now estimated at \$170,000,000.

DETAILS OF OSAKA'S DISASTROUS FIRE.

[From Consul Geo. N. West, Kobe, Japan.]

Hindered by strong wind, insufficient water supply, narrow streets, and crowds, the fire department of Osaka was not able to get control of a fire that started in the southern part of that city on January 16 until 4,779 houses had been destroyed or damaged, entailing a property loss of \$3,457,632. The fact that this was a section of Osaka where one-story houses predominated accounts for the relatively small valuation of the property destroyed, for the area burned over approximated three-fourths of a mile in length and one-fifth of a mile in width.

To fight the conflagration 26 fire engines and 167 fire extinguishers of various makes were used. Although 26,000 feet of hose were used, no lengths burst during the fire. One hundred and thirty hydrants were available for use, these being principally 4-inch double hydrants connected to 12-inch mains at Nipponbashi Street and 20-inch mains at Namba Street, supplied from a standpipe which normally gives 200 to 300 gallons per minute per hydrant.

Osaka is constructing a large waterworks, and it is believed that with its completion and an ample supply of water fires may more readily be controlled. High towers are located in the different sections of Osaka and Kobe where watchmen are stationed to give warning of fires, and at these towers hand-hose reels are usually kept for immediate use.

GRAPEVINES DAMAGED BY FROST IN GERMANY.

[From Consul Milo A. Jewett, Kehl.]

Reports from various parts of Alsace-Lorraine indicate that serious damage has been done to the grapevines by frost. Alsace-Lorraine contains about 25 per cent of all German vineyards.

The winter was abnormally warm and the vines began to bud and grow in January. In the latter part of January and on the night of February 3 there were severe frosts. At Strassburg the temperature fell to 5° F. A report from the Erstein district states that 50 per cent of the vines are so seriously damaged that they will not bear this year. The damage is said to be most important in the lower lying vineyards; on the uplands the vines seem to have escaped serious injury.

Vineyards in the Baden portion of this consular district have also suffered from the cold and frost, but in Baden the production of wine is not very important.

Program for the Ghent Exposition.

The American minister at Brussels, Belgium, forwards copy (in English) of the program and prospectus for the proposed International Exposition in Ghent, plans for which were given in Daily Consular and Trade Reports for February 24 and April 1, 1912. The pamphlets will be loaned on application to the Bureau of Manufactures.

A new French Riviera is being developed on the Picardy seacoast near Boulogne. Considerable expenditures are being made.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

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THE NATIONAL COMMERCIAL CONFERENCE.

[By A. H. Baldwin, Chief, Bureau of Manufactures.]

It is already evident that the commercial conference which will be held in Washington beginning April 22 next will bring delegates from every part of the United States. Alaska, Porto Rico, Hawaii, and the Philippines will be represented, and also most of the national associations established for the promotion of a single commercial interest. This will insure the most truly representative commercial gathering, probably, that has ever been brought together in the United States.

The spirit and clearness of vision with which the delegates to this conference approach their task of organization will largely determine the value and permanence of the national association which, it is hoped, will be established as a result of this April meeting. It is believed that the Bureau of Manufactures is justified in offering the suggestion that the primary purpose of the meeting to establish a broadly representative national organization be kept persistently in view by delegates. It is deemed that loss of time and effort could be the only result if the meeting enters on the discussion of other matters, however important, if these matters are not essentially and closely related to the main subject; that is, the plan of organization of the national chamber of commerce. Further, it is believed that it will be difficult, if not entirely impracticable, to state at this conference in specific terms many of the details of the subsequent service which will be rendered by the national organization. The wisdom of indicating this service in the broadest terms in planning the organization seems apparent, and it is believed that the development of the actual details of this service can safely be left to the skill of the chosen directors of the organization as advised by the constituent associations. The conference can so fix the essential form of the association that its broadly representative and national character shall be firmly established, and it can also, it is hoped, find directors who will be willing to devote their time and interest unselfishly to the development of the association.

The attention of delegates is also specially invited to the fact that at first, or until Congress should take some action with respect to

authorizing Government officials to take active part in the development of the new national organization, the relations of representatives of the Department of Commerce and Labor and other Federal departments can be advisory only, and essentially those of helpful cooperation. This cooperation, it is certain, can always be secured by the national organization if properly conducted, but it will be impracticable to grant Government officials any vote or power in the conduct or control of the association until such time as, through the development of its commercial importance and truly representative national character, definite official relation may be established through action by Congress.

Obviously, commercial organizations have it entirely within their power to establish this national association and start it at once upon its useful work without aid from the Government at first other than that indicated above, and the exact form of the relations which it will finally sustain with Government departments must, it is believed, evolve gradually out of the experience of the organization. It seems certain that there will come, naturally, a close and cordial relation between it and the Federal service, and this relation can readily be given official form by sanction of Congress, if desired, at a later date; but it also appears certain that this relation can not be defined in advance by the conference of April, and that no action can be taken toward immediately establishing this bond of union further, perhaps, than to provide for some form of unofficial advisory council which would afford a dignified method of placing at the service of the national body any information or suggestions which might be desired by it from the commercial promotive branches of the Government.

It is evident that any discussion of moot questions in this meeting would be futile. The growth of the service and value of the national organization will depend much on the character of its opening efforts. If its power is diverted to special or narrow interests, or if it fails to keep in the broad unobstructed path of such purely promotive and constructive work as all its constituent commercial organizations can be in substantial agreement with, its life will be short. It would be manifestly unfair to expect too much at once from the organization. Its directors can not hope to guide its activities intelligently until a fairly complete record of the essential facts in regard to its constituent members is established, and a wide knowledge also of the work of the Federal Government in all its promotive branches is secured by the officers of the national organization. Probably some study of the methods of commercial organizations abroad would also be required in order to adapt to the conditions in the United States those activities which would be appropriate to the needs of the new association.

WHOLESALE PRICES IN UNITED STATES.

[Announcement of Bureau of Labor, Department of Commerce and Labor.]

Wholesale prices during 1911 showed a slight decline from those of 1910, according to the annual report on wholesale prices shortly to appear as Bulletin No. 99. The fluctuation from month to month was small, with a slight upward tendency during the latter half of the year. The most important features in the movement of prices during the year were the advance in the prices of food products and the noticeable decline in those of metals and implements. Measured by the 257 commodities included in the Bureau of Labor's recent investigation, wholesale prices in 1911 declined 1.7 per cent from prices in 1910, and with this decline were only 0.2 per cent below the high average of 1907, the year of highest prices within the period 1890 to 1911.

CONSTRUCTION WORK ABROAD.**CANADA.**

[From Consul General John G. Foster, Ottawa.]

General Appropriations for Government Works.

In the supplementary estimates (sessional paper No. 4) for the fiscal year ending March 31, 1913, presented to the Canadian House of Commons, numerous appropriations are made for public buildings and works throughout the Dominion.

Provisions which are of interest to Ottawa are an item of \$500,000 for a new departmental building (\$280,000 being a revote), an addition to the library, \$30,000, and a new drill hall, \$50,000. It is expected that the completed drill hall will cost about \$200,000.

Provision of \$1,000,000 is made in the estimates for acquiring site and construction of a Dominion Government building in London, England, and \$1,500,000 for the construction, acquisition, leasing, or expropriation of terminal elevators. The Hudson Bay Railway and Terminal is given \$1,500,000 for construction work, terminals, and elevators.

The total supplementary estimates amount to \$19,610,040, of which \$13,072,527 is chargeable to consolidated fund and \$6,537,513 is chargeable to capital account. They include extensive construction of public buildings, public roads, ship canals, river and harbor work, etc., throughout the Dominion.

[From Consul General David F. Wilber, Vancouver, Canada.]

British Columbia Construction Items.

Firms interested in these items should advise the consulate general of the fact, sending their catalogues, if they desire, and also whether they are successful in obtaining business as a result of their inquiries. Some firms send merely carbon copies of their letters, without going to the unnecessary trouble of a transmitting letter. There have been cases where such action by manufacturers has enabled the office to later put them in touch with other opportunities, as the names are on file here and we knew them to be interested in obtaining business in British Columbia. Manufacturers having agents in this Province should advise this office of the agents' names and addresses.

With reference to the large number of developments each week in Vancouver, summarized as follows and previously announced in Daily Consular and Trade Reports, it will be apparent that there are many opportunities for the sale of American material, supplies, machinery, and equipment. In some lines, as building hardware, there is keen competition and small profit for the local merchant, but many American hardware specialties are not well known, apparently, and could be introduced with profit to the dealer and manufacturer. In these and all other lines local representation is essential to obtain the most satisfactory results, even when sales are made exclusively to jobbers or to some one firm. It has been pointed out repeatedly that the period elapsing between the call for tenders and the closing of tenders is usually too short to permit of a concern not on the spot competing successfully. The importance has been shown also of making sure that architects and designers are fully acquainted with machinery, equipment, specialties, materials, or other supplies that

might be utilized by them to advantage in works under their supervision.

Flour mills.—The Moose Jaw Milling Co., of Saskatchewan, whose plant was recently destroyed by fire, will build a mill at Port Mann.

Sawmills.—A sawmill proposed at Chicken Lake, British Columbia, capacity 15,000 feet daily; no particulars are given. Robert Marr, of Princeton, British Columbia, is erecting a sawmill to cut 35,000 feet daily.

Powder plant.—It is estimated that the increased demand for explosives for blasting is to result in extensions to each of the plants of the Canadian Explosives (Ltd.) in this Province, at Nanaimo, Victoria, and Bowen Island, particularly the last.

Machine shops.—The Schaafe Machine Works, of New Westminster, British Columbia, are to build a new and larger plant.

Laundry.—The New Model Laundry Co. is being incorporated by Crompton & Berton, brokers (Pemberton Block, Victoria, British Columbia), and will erect a \$10,000 laundry building, equipped with most modern machinery.

Biscuit and confectionery factory.—Ramsay Bros. & Co. (Ltd.), 201 Raymur Avenue, Vancouver, British Columbia, are to make a \$17,000 extension to their factory.

Cold-storage plant.—The Chilliwack (British Columbia) Creamery Association plans erection of a refrigerating plant, capacity of 24 tons daily. The equipment has probably been purchased through a Vancouver firm. The same concern contemplates manufacturing ice cream on an extensive scale.

Cannery.—The farmers about Arrow Lakes contemplate establishing a cannery at Nakusp, British Columbia.

Dairy and creamery.—George E. Knight, Edmonds, British Columbia, plans to build a large modern dairy and creamery.

Steamer.—A \$160,000 200-foot steamer, to be finest on interior waters, is to be built by Port Arthur Iron Works (said to be branch of Cleveland Iron Works), for use on Kootenai Lake between Nelson and Kootenai Landing, as a link in the Canadian Pacific Railway system.

Dock.—British and French financiers are reported to have decided to build a floating dry dock for Vancouver; capital subscribed and joint boards formed in London and Paris. The dock to have a lifting power of 15,000 tons, a total length of 600 feet, a depth of 65 feet, and a width of 80 feet. It will be built in two years. It will be possible to use parts of the dock separately for smaller vessels or to put them together and use them as a whole for larger vessels.

Bridge.—Chief Provisional Engineer Griffiths, of Victoria, British Columbia, will recommend a \$250,000 bridge to cross the Kootenai River at Nelson, British Columbia, instead of a \$75,000 bridge, as previously stated.

Terminal.—Guthrie, McDougall & Co. (A. O. McDougall is of Portland, Oreg.) have contract for reclamation and filling work for the \$3,000,000 yards and terminal of the Great Northern Railway here. Two steam shovels are to be put to work immediately. One million cubic yards of dirt, it is stated, will have to be moved. Alexander Stewart, assistant chief engineer of the Great Northern, of Seattle, is named as the official who is drawing the plans for this extensive work. In addition to Canadian Pacific plans for a large new terminal station here, that railway is making large extensions to its yards and freight handling facilities, spending \$2,000,000 this year in Vancouver.

Railway stations.—It has been stated that F. M. Battenbury, architect, Victoria, British Columbia, has been commissioned to design the stations for the Canadian Northern Pacific Railway of this Province.

Telegraph.—The Dominion Government is appropriating a sum to extend its telegraph line down through the Okanagan Lake district to Penticton and for running an additional wire to Vernon, Kelowna, Summerland, and Penticton.

Telephones.—The British Columbia Shipowners' Association and the local Shipmasters' Association are urging the Dominion Government to establish a telephone line along coast between Powell River and Vancouver, similar to telephone lines along the St. Lawrence River and other shores in the East, which could be used in emergencies.

Light and power.—Concerning the reported purchase of the Coteau Power Co. by MacKenzie & Mann (Canadian Northern Pacific Railway) and the burning of the power plant of the city of Vernon, it is now reported likely that the city will not rebuild, but will arrange with the Coteau Power Co. for supply of light and power.

Hydroelectric power plants.—Tenders have been called for erecting a concrete and steel power station, including furnishing of all materials except as specified, for municipality of Penticton, British Columbia, tenders to be received by F. H. Latimer, con-

sulting engineer, at that place, until April 18, accompanied by a certified check for 5 per cent of the contract price as a guaranty. Plans, specifications, etc., obtainable from consulting engineer.

The British Columbia Electric Railway (Vancouver, British Columbia) is reported to have appropriated \$2,750,000 for new electrical equipment alone, for enlarging generating stations, improving service from substations, and general extension of light and power lines during 1912. Approximately \$1,000,000 is to be spent in installing three 14,000 horsepower units in the hydroelectric station on north arm of Burrard Inlet; \$225,000 for steam-turbo plant in this city (work well advanced); \$1,500,000 on substation and light and service improvements, embracing the new \$125,000 Earls Road substation, equipment soon to be purchased, including two 1,000-kilowatt motor generator sets, two 3,000-kilowatt transformer banks, and eight arc regulators. The substations at Vancouver, Lulu Island, New Westminster, Point Grey, and Burnaby are to be doubled in capacity. Also \$25,000 is to be spent for alterations and extensions to emergency power plant in Victoria.

Tramways.—(1) City Council of Nanaimo, British Columbia, desires a charter to operate a tramway through the tributary region, but has been refused by the provincial government, which, it is stated, is willing to "grant a charter to a private company." It would be well for manufacturers of equipment to keep in touch with the situation. (2) G. W. Bell, a merchant of Revelstoke, British Columbia, is promoting a company to build a tramway to Columbia Park. (3) Among other interurban electric railways under contemplation is a line from Vancouver to Mission, another from Vancouver to Ladner, one from New Westminster to Blaine, and one (problematic) from Ladner to Seattle, Wash.

Water-supply system.—(1) City of Kamloops, British Columbia, through its consulting engineers, Dutcher & Maxwell, are calling for tenders on some 5,000 feet of steel pipe, water hydrants, valves, and fishings (about \$10,000 worth) for big concrete reservoir to be built at Kamloops. (2) Elk Creeks Waterworks (Ltd.), Chilliwack, British Columbia, which has franchise for local water supply, is to make a 15-mile extension this year, also numerous improvements.

(3) Cleveland & Cameron (Winch Building, Vancouver, British Columbia), consulting engineers for municipality of Burnaby, are completing plans for two 300,000-gallon concrete reservoirs, one of which will be built as an addition to the municipality's present reservoir.

Public works.—South Vancouver, British Columbia, passed by-laws on March 23, 1912, appropriating \$100,000 for sidewalks, \$900,000 for roads, \$325,000 for waterworks extensions, and \$505,000 for school buildings.

The engineer of the municipality of Burnaby (Edmonds, British Columbia) has recommended: That the municipality open up its own quarry and establish there a crushing and screening plant, cost about \$25,000; that the receiving station on the river should consist of bunkers of about 4,000 yards capacity, with a movable tower, with horizontal boom derrick having an unloading capacity of not less than 50 yards per hour, cost about \$40,000; and that the distribution bunkers at Highland Park have a capacity of about 2,500 yards and be arranged to unload and reload into cars by suitable conveying apparatus, cost about \$15,000. Interested American firms might assist the council in considering the subject.

Schools.—(1) Nanaimo, British Columbia, is to spend \$80,000 on its schools in 1912, \$50,000 on a new building, and the balance on repairs, salaries, etc. (2) Rossland, British Columbia, is planning for a new 14-room brick schoolhouse. (3) A \$50,000 school building is soon to be erected at Enderby, British Columbia. (4) Chilliwack is to build a \$40,000 high-school building at once. (5) Holy Rosary Cathedral Parish (Vancouver, British Columbia) is to erect a large school building for social, athletic, and scholastic purposes. (6) Tenders are to be received until April 8 for erecting a 3-story brick and millwork school building at New Westminster, British Columbia, one of the school buildings for which that city will spend about \$200,000. Separate tenders will be received for the different trade contracts: Gardiner & Mercer, of the same city, are supervising architects and will receive tenders.

Fire equipment.—City of New Westminster, British Columbia, is considering a by-law for purchasing a \$14,000 auto aerial fire truck. Immediate attention should be given this.

Fire escapes.—The Southside Central Improvement Association (F. M. Thompson, president), this city, has started a movement to obtain better fire escapes for some city schools.

Garbage carts.—Council of South Vancouver, British Columbia, is planning to provide for removing and disposing of garbage. Tenders will probably be called for seven water-tight, neatly painted, covered garbage carts (\$8,816 initial appropriation).

For first year garbage will be dumped into ravines and gulleys, but erection of a garbage incinerator will probably soon be considered and American manufacturers of equipment for such plants might find it profitable to investigate. As residents are required to provide suitable garbage receptacles, there will no doubt be a considerably increased sale of such articles.

Hotels.—(1) Mesher & Co., New Westminster, British Columbia, are contractors for a 200-room hotel for A. E. Waterhouse at Port Alberni, British Columbia. (2) Thomas Mathews, Vancouver, British Columbia, has obtained a building permit for a 6-story steel and concrete hotel building. (3) The Canadian Northern Pacific Railway plans a summer resort and hotel at Departure Bay, British Columbia, on a 122-acre site. (4) Horton & Phipps, Victoria, British Columbia, are architects for a \$25,000 hotel building for C. P. Allen, for which the Saanich (British Columbia) council has issued a permit. (5) A. J. Pappas, Vancouver, British Columbia, is to erect a \$15,000 3-story restaurant and hotel at Coquitlam, British Columbia, for which Charles Davies, of Coquitlam, is general contractor. (6) G. A. Hankey Co., Vernon, British Columbia, owner of Hotel Russell, New Westminster, is to spend \$75,000 in adding a 4-story brick block and improving its bar and billiard room. (7) The Pioneer Hotel, New Westminster, British Columbia, is also to make extensive additions and improvements.

Churches.—(1) An Episcopal Church is to be built at West Arrow Park, near Arrow Park, on Upper Arrow Lake, British Columbia. (2) A \$100,000 building is to be erected by First Presbyterian Church, Victoria, British Columbia. (3) It is expected that the First Congregational Church and the First Baptist Church, of Victoria, British Columbia, will have plans prepared shortly for new church buildings.

Hospital.—North Vancouver, British Columbia, plans erection of a hospital. Citizens of Fort George, British Columbia, are to build a hospital at once.

Rooming houses.—(1) The Vancouver Realty Co. has obtained a permit for a \$40,000 6-story brick and stone rooming house building in Vancouver. (2) An \$80,000 6-story brick and concrete store and rooming house is to be erected by Hooper & Snider, Vancouver, Frantz Construction Co. of 346 Pender Street, contractors. (3) W. P. White, Hutchinson Building, Vancouver, British Columbia, is architect for a 3-story \$33,000 brick rooming house, for E. P. Buchanan; for a \$55,000 4-story brick apartment house, general contracts for which will soon be let; and for an 8-story apartment building for A. D. Goldstein, for which contracts are soon to be let for ornamental ironwork, marble, and hardwood interior trimmings.

Building activity at Nelson.—In addition to the items in Daily Consular and Trade Reports for March 30 the following buildings are planned for Nelson, British Columbia: A \$40,000 brewery; a \$10,000 brick office building, for E. K. Strachan; a \$30,000 brick and concrete office and store building for E. B. McDermid (of Vancouver, British Columbia); and a \$25,000 brick and concrete office and store building, for A. L. McCullough. The power plant for the new paper mill will obtain 5,000 horsepower from a 900-foot head and will cost about \$150,000. This and the paper mill are stated to be definitely assured. The Yale Columbia Lumber Co.'s mill will be rebuilt.

Post office.—Work has been resumed on the post office and customhouse for Grand Forks, British Columbia, a 2-story \$45,000 brick and granite building for which Barnard Lequime, of that city, is contractor.

Moving-picture theater.—William Turnbull has received a license from the council of North Vancouver, for a moving-picture theater.

Masonic hall.—Kamloops (British Columbia) Masons are to erect a 3-story, ferro-concrete lodge and office building.

Club building.—The Vancouver Athletic Club is selling its present property and will erect a 5-story \$125,000 club building.

Golf links.—Sir John Eardley Wilmot has arranged for constructing a 9-hole \$50,000 golf course at Nelson, British Columbia, for the use of tourists. It will later be doubled to full 18-hole course.

A skating rink is to be built at Trail, British Columbia.

[From Montreal Gazette.]

A Large Cement Flume.

The natural resources department of the Canadian Pacific Railway has made the announcement that the contract will be let for what is said to be one of the engineering feats on the American continent. It is for the construction of a cement flume $2\frac{1}{2}$ miles long, 16 feet wide, and 10 feet deep. It will be erected on pillars some 16 feet in height. It is to be built in connection with the company's irrigation projects at Bassano, Alberta, and will be used to carry water across a valley $2\frac{1}{2}$ miles in width. It will be the main waterway of the system.

FRENCH WEST INDIES.

[From Consul F. T. F. Dumont, Basse Terre, Guadeloupe.]

New Factories in Guadeloupe.

Le Nouvelliste, a daily newspaper published at Pointe a Pitre, announces that a factory for the manufacture of coconut oil is to be established at that place by M. Hennequin.

Le Cri de la Guadeloupe, published at the same place, announces that H. Maston has been authorized to establish a distillery for bay oil at 57 Rue Peynier, Pointe a Pitre.

VENEZUELA.

[From Consul Thomas W. Voetter, La Guaira.]

New Brewery—Hydroelectrical Plant.

The Cervecería Venezolana de Maiquetia, capital 1,000,000 bolívares (\$193,000), has been organized to establish a brewery at Maiquetia, a municipality adjoining La Guaira. The incorporators are residents of Caracas, and its legal domicile is in that city. It is stated that Mamo electric power will be largely used in operating the plant.

Considerable work is being done on the hydroelectrical plant at Mamo, west of La Guaira, whither roads have been built for transporting the machinery, which has been ordered. The plant is expected to be in operation by August.

There will be developed 2,600 horsepower, part of which will be transmitted to Caracas and part to La Guaira. There are rumors that an electric railway from Maiquetia via La Guaira to Macuto will be established, either by taking over the steam tram line now operating between those points or by constructing a new line. The interests constructing the new plant at Mamo have close relations with the owners of the electric light plant now operating at La Guaira, so that it is probable that this will also be taken over.

ARGENTINA.

[From Consul General R. M. Bartleman, Buenos Aires.]

Contract Awarded for Municipal Waterworks.

The Government has accepted the tender of the firm of Lavinás, Poli y Cia., Calle Bartolome Mitre 441, Buenos Aires, Argentina, for the construction at Caballito of the new waterworks for the city. The amount of the tender was \$551,376, United States gold.

GERMANY.

[From Consul Samuel H. Shank, Mannheim.]

Loan for Public Improvements.

The city of Mannheim has issued \$2,380,000 of bonds. The money is to be used for extensions of the waterworks, gas works, street car lines, electric light plant, new school buildings, a new hospital, and acquiring new territory.

The city buys up all land lying contiguous and holds it until individuals desire it for building purposes. In this way the city is kept compact, as it will not sell outlying lots, but only those adjoining already improved property. This is an economy, as it is not

necessary for the city to build sewers and streets nor to extend its gas, water, and electric mains along stretches of unimproved property. The city also owns land adjacent to one of the harbors, and this it sells for factory sites.

The contracts are to be let for the various buildings referred to some time during the ensuing year. Plans and details may be had by applying to "Oberbürgermeisteramt, Mannheim, Baden," but postage for sending forms should accompany the request.

RUSSIA.

[From Ambassador Curtis Guild, St. Petersburg.]

New Port Works.

Sebastopol, formerly a naval base only, is to be opened as a commercial port. Work has already been started on the construction of a new commercial port in Streletz Bay at that point. The port is expected to be ready for traffic not later than 1914.

ROUMANIA.

[From American Minister John B. Jackson, Bucharest.]

Municipal Loans for Public Improvements.

A bill is pending in the Roumanian Parliament, which will probably soon be passed, authorizing the city of Craiova to contract a 4 per cent loan of \$5,400,000 for conversion of existing loans (amounting in all to about \$3,000,000) and construction of public works and local improvements, such as sewers, tram lines, a municipal palace, crematories, etc. Another bill is pending to authorize the city of Braila to contract a smaller loan, a part of the proceeds of which are to be applied to improving the water service and constructing a reservoir, public urinals, and sewers. Similar improvements are contemplated sooner or later in several Roumanian cities of minor importance.

CHINA.

[From Consul Lester Maynard, Harbin, Manchuria.]

Improvements for the City.

A summary of the requirements which the Harbin town council reports to the municipal delegates follows: Paving streets, \$600,361; bridges, \$16,000; ditches, \$93,535; draining in Pristan, \$97,850; total, \$807,746.

Diminishing Whitefish Catch in Great Lakes.

A report from Consul Felix S. S. Johnson, of Kingston, Canada, shows a large decrease in the whitefish catch in the Great Lakes during recent years; official returns for 1910 placing the total at 3,345,468 pounds, in contrast to 3,797,834 pounds in 1909, notwithstanding the efforts of the Sarnia hatchery. The increase of trout in lake waters is said by the consul to have had much to do with the disappearance of the whitefish, the trout catch during 1910 amounting to 5,806,850 pounds, an advance of 1,560,000 pounds in 10 years. The new hatchery established at Wiarton is propagating salmon trout. Consul Johnson's complete report has been forwarded to the Bureau of Fisheries.

DEMAND FOR FOREIGN COAL.

[From Consul Alfred A. Winslow, Valparaiso, Chile.]

Chilean Trade Increasing.

The demand for foreign coal continues good, notwithstanding the increased output of the Chilean mines, which amounted to more than 1,000,000 tons for 1911. The imports of coal for 1911 amounted to 1,274,118 tons, against 1,293,140 tons for 1910. Of this England furnished 705,762 tons, and Australia 526,643 tons, against 861,887 and 426,867, respectively, for 1910. No American coal was imported during 1911 and only 7,260 tons during 1910. Only 51,861 tons of American coal have been sold in Chile during the past six years.

Of late there has been more inquiry for American coal than for many years, owing largely to the strike in England, and it seems that here is a chance to get a foothold if American interests act promptly. [A list of houses in position to handle American coal to advantage may be obtained from the Bureau of Manufactures.]

[From Consul Joseph I. Brittain, Prague, Austria.]

Bohemia's Coal Supply.

There is very little coal imported into the Prague consular district, as there are extensive deposits of bituminous coal in the vicinity of Kladno, where are also located steel works and furnaces.

In northern Bohemia, in the vicinity of Teplitz and Brux, are immense deposits of brown coal or lignite. There are also good coal deposits in Moravia. Germany exports coal to the factories in northeastern Bohemia, as the freight to this territory is less than from the Bohemian coal fields.

Coke is also imported from Germany, as it contains less sulphur than the Bohemian product. Coke is used in American base-burner stoves, which have a good sale here. Hard coal is also used in these stoves, but in limited quantities, as it costs \$15.83 a ton. There are possibly 400 to 450 tons of hard coal sold here annually. Large quantities of brown coal are exported from Bohemia to Germany. In 1909 the exports were 1,620,000 tons, and in 1910, 1,535,000 tons. In 1911 the exports by way of the Elbe were much less on account of the very low water during the summer months.

The freight in Bohemia is high. From Bodenbach, the frontier between Germany and Bohemia, to Prague, less than 80 miles, the freight on 10 tons of coal is \$13.16, while from the seacoast at Stettin, Germany, to Bodenbach, 226 miles, the freight is but \$22.25 for 10 tons. [A list of coal dealers and importers in Prague may be obtained from the Bureau of Manufactures.]

BRAZILIAN TRADE NOTES.

[From the Review, Rio de Janeiro.]

Rubber enterprise.—The Guapore Rubber Co., capital \$7,500,000, is authorized by decree No. 9385 to operate in this Republic. Its domicile is Portland, Me., U. S. A.

Brewery.—The Companhia Fabrica de Cerveja Mogy Mirim, capital \$200,000 gold, is authorized by decree No. 9399 to do business in the Republic. Its domicile is in the city of Mogy Mirim, State of Sao Paulo, and its object is brewing.

Whaling station.—The Urd Whaling Co., capital \$140,000, has been formed at Sandefjord, Norway, and will establish a station near Bahia, Brazil, with a floating factory, and two whale steamers. Operations are expected to commence in May, 1912.

TEA TRADE OF ASIA.

[From Consul General George E. Anderson, Hongkong.]

While the production of tea in the districts from which Hongkong draws its supplies seems to have been greater in 1911 than in 1910, the total exports of tea by way of Hongkong during 1911 were only about 74 per cent of those in the year previous. The statistics of the Hongkong General Chamber of Commerce show the exports to have been as follows, in chests:

	1910	1911
To continental Europe.....	16,950	4,385
To Great Britain.....	37,948	48,387
To the United States and Canada.....	35,985	12,682
Total.....	90,883	65,454

The increased shipments to Europe were in line with the augmented demand in that part of the world. The decrease in the volume of the shipments to the United States and Canada was due partly to American restrictions against artificial coloring, but particularly affected Canada, for the value of shipments to the United States rose considerably. However, the decreasing nature of the movement to the United States is indicated by the fact that figures covering the exports of tea from Foochow show that shipments to Europe from that port increased from 11,143,811 pounds in 1910 to 14,329,339 pounds in 1911, while shipments to the United States and Canada declined from 4,589,033 pounds to 3,260,018 pounds, total shipments to all parts of the world from Foochow amounting to 20,688,915 pounds in 1911 compared with 19,159,580 pounds in the year 1910.

The decrease in shipments by way of Hongkong in view of the increased shipments from producing centers is significant. The larger shipments to Europe go direct from the ports concerned, though the increase has not been great enough to materially modify shipping arrangements. The value of tea shipped from Hongkong to the United States, including Hawaii, during the past year was \$123,423, as compared with \$117,589 in 1910.

[From Consul General Thomas Sammons, Yokohama, Japan.]

Japanese Production of Tea by Prefectures.

The cultivation of the tea plant, which is a shrub with an average life of 15 years, is general throughout Japan, the acreage devoted to it aggregating 123,062 in 1909. The Prefectures of Shidzuoka, Saitama, and Miye are the principal suppliers to the export trade, while Kyoto, Nara, and Gifu largely supply the home market. Kumamoto, Fukuoka, and Kochi Prefectures produce black teas.

At the time of picking, the leaves are fired once and then sent to the factories, which are usually located near the export markets. Here the tea is refired and cured and prepared for shipment and consumption. The export centers of Japan are not numerous, there being only six of importance—Yokohama, Kobe, Moji, Shimidzu (the port of Shidzuoka), Yokkaichi (for Miye exports), and Nagasaki.

Tea is grown in every Prefecture of the main archipelago except the most northern one, Aomori. The following table gives the list in the

order of greatest production, followed by the value as reported by the Central Tea Guild at Tokyo, for the year 1911:

Prefecture.	Pounds.	Value.	Prefecture.	Pounds.	Value.
Shidzuoka.....	20,711,040	\$2,307,477	Shimane.....	328,672	\$43,823
Miye.....	4,813,275	473,623	Nagasaki.....	604,230	87,599
Kyoto-Fu.....	3,609,560	446,538	Tokushima.....	683,433	38,521
Kumamoto.....	2,985,525	218,620	Okayama.....	682,961	31,986
Nara.....	2,579,080	212,198	Saga.....	629,314	57,179
Gifu.....	2,305,515	158,206	Chiba.....	597,832	73,683
Kagoshima.....	2,292,745	229,723	Aichi.....	542,181	39,401
Fukuoka.....	1,975,700	131,242	Osaka-Fu.....	527,913	23,300
Ibaraki.....	1,911,756	242,088	Tokyo-Fu.....	491,020	69,206
Shiga.....	1,828,176	229,105	Toyama.....	374,960	54,354
Yamaguchi.....	1,603,485	46,621	Tottori.....	170,580	27,575
Kochi.....	1,508,309	66,808	Tochigi.....	153,035	5,843
Saitama.....	1,432,115	207,982	Kanagawa.....	118,210	18,305
Hyogo.....	1,411,697	75,318	Fukushima.....	100,445	14,782
Miyazaki.....	1,371,110	119,954	Miyagi.....	79,935	10,038
Wakayama.....	1,127,223	40,772	Yamagata.....	59,445	5,466
Niigata.....	1,103,309	127,873	Gumma.....	55,965	7,967
Ishikawa.....	1,062,359	102,587	Yamanashi.....	49,420	5,457
Hiroshima.....	1,054,067	27,761	Nagano.....	41,975	0,322
Yehime.....	898,824	48,686	Kagawa.....	36,950	1,356
Oita.....	862,984	102,915	Iwate.....	6,450	2,639
Fukui.....	848,849	47,039	Akita.....	4,555	627

Shipments by Countries and Varieties.

The United States is, of course, the largest customer in this market. The port of Shimidzu (Shidzuoka) is the central shipping point for teas to the United States, followed by Yokohama and Kobe. Before the Japanese began the manufacture of finished teas, however, the business was almost wholly carried on in the foreign settlements of Yokohama and Kobe.

As to the different varieties of tea shipped and the various countries of destination, detailed customs returns for 1911 have not yet been published, but the following summaries in the advance sheets may be of interest:

Countries.	Pounds.	Value.	Kinds.	Pounds.	Value.
United States.....	39,218,720	\$6,638,609	Green:		
Canada.....	2,829,837	429,346	Pan fired.....	27,112,833	\$5,012,061
China.....	296,713	12,317	Basket fired.....	9,275,292	1,826,158
Hawaii.....	137,488	23,935	Stubs or nibs.....	200,179	23,914
Kwangtung Province.....	200,359	25,257	Coarse (Bancha).....	133,345	8,914
Russia, Asiatic.....	28,616	1,502	Black.....	645,607	73,158
Straits Settlements.....	107,841	14,516	Brick.....	24,301	686
Other countries.....	97,418	15,329	Dust.....	5,525,145	100,303
Total.....	42,916,792	7,166,871	Total.....	42,916,792	7,166,871

CHEAP ORANGES IN CHINA.

[From Consul General Roger S. Greene, Hankow.]

The oranges eaten by the Chinese here are practically all grown in China, and most of them in places near enough to market to make possible transporting them without special precautions. Prices of oranges vary greatly according to the kind, quality, and season of the year. At present (mid-February) Szechwan loose-skin oranges (mandarins) sell at the equivalent of about 44 cents gold per basket containing about 175 oranges, while the tight-skinned variety from Canton sells for the equivalent of 67 cents gold per basket of 100 oranges.

MANCHURIAN TRADE NOTES.

[From Consul Lester Maynard, Harbin, China, Mar. 2.]

Australian wheat.—The Harbin branch of Samuel & Co. has sold to the Russian Flour Milling Co. a cargo of 6,000 tons of Australian wheat for April delivery at Vladivostok.

The new bean-oil mill of Kiosensha & Co. (Japanese), at Old Harbin, has been completed, inspected, and passed by the technical and sanitary committee of the Chinese Eastern Railway, and will soon be in operation.

Russian bank.—The Russian authorities contemplate opening a branch of the Russian Treasury at Harbin. The manager of the Vladivostok branch of the Imperial Bank visited Harbin in order to study conditions, and concludes that a branch of the Imperial Bank at this place would be desirable. The Harbin Chamber of Commerce has petitioned that it be opened.

New freight line.—The direct freight service over the Chinese Eastern and South Manchuria Railways will go into effect April 14, and arrangements are being completed for the delivery of freight and documents between Changchun and Kwanchengtzu stations. Thomas Cook & Son, of London, will be authorized to issue tickets between Kwanchengtzu and Harbin, which will be honored by the Chinese Eastern Railway.

Cattle-plague prevention.—The Russian Ministry of Interior has decided to send an expedition through Mongolia and Manchuria for inoculating cattle, to prevent cattle plague. The five detachments of the expedition will have headquarters at Urga, Kerulan, Uldja, Hailar, and Tsitsihar. At each of the last two points will be stationed a veterinary surgeon, with three assistants and an interpreter, and at the other stations one veterinary surgeon, two assistants, and an interpreter. In this way the entire district covered by Russian cattle buyers in Manchuria and Mongolia will be included. The veterinary surgeons will travel to various parts of their districts at the request and expense of cattle dealers. Provided the stock of serum is sufficient, the work of the expedition will not be confined to cattle owned by Russians, but they will be allowed to inoculate Chinese and Mongolian cattle also. With these precautions it is hoped to prevent cattle plague during the coming season.

The soya-bean market of Harbin is inactive now and has been for three weeks. This may be partially accounted for by the Chinese new year, but the main cause was the heavy purchases prior to the holidays by Mitsui & Co. These purchases totaled about two-thirds of the available stocks, and forced the price so high that it was impossible to ship. The heavy purchases were apparently made in an effort to corner the market, and considerable uneasiness was felt after their purchases ceased, as it was not known whether they would persist or not in their effort to corner the market. The price has gradually dropped to 64 kopecks (33 cents) per pood (36.112 pounds), but no sales are being recorded. According to London market prices, however, beans can not be purchased in Vladivostok at 91 kopecks (47 cents) per pood, but at present Mitsui & Co. will not sell under 94 kopecks (48½ cents) per pood. It is reported that in addition to the beans shipped through Vladivostok for exportation, Mitsui & Co. have a stock of 1,000 carloads at Vladivostok.

[From Consul Albert W. Pentius, Dalny, Japanese leased territory.]

Two bean-oil tank cars constructed at the railway workshops, Dalny, were subjected to a trial run with satisfactory results. Each car has 27 tons capacity and is partitioned into four chambers for transporting oil in small consignments.

Railway traffic.—In January the South Manchuria Railway had record traffic returns totaling \$1,330,448 and averaging \$42,918 per day. This was an increase of \$232,039 over January, 1911, and an increase of \$7,485 in the daily average. The aggregate tonnage of goods transported from last October to January reached 1,746,273 tons. The arrivals of beans and bean cake at Dalny in January were 157,640 tons, while the arrivals at Newchwang were only 16,695 tons.

CHILEAN TRADE AND INDUSTRIAL NOTES.

[From Consul Alfred A. Winslow, Valparaiso.]

The new wireless station at Puerto Montt is to be strong enough to communicate with Punta Arenas, 700 miles distant.

Lumber movements.—During 1911, 29,410 cars of lumber were transported by the Government railways of Chile, against 13,937 for 1907.

Nine blooded horses arrived in Chile from England, February 1, and it is said more are to follow. Much is being done to improve live stock in this country.

Japan's consumption of nitrate increased from 5,892 tons in 1907 to 28,800 tons in 1911, and it is expected that 40,000 tons will be required for 1912.

Railway opening.—June 12, 1912, has been set for opening the Longitudinal Railway to Puerto Montt, in the southern part of the inhabitable portion of Chile.

Cooking schools.—The Chilean Government has decided to expend \$12,775 United States gold, during 1912, for a cooking department in some of the professional schools.

Railway progress.—It is expected that the Longitudinal Railway will be completed by June, 1912, so that one may travel by rail from Santiago to Serena, about 300 miles north.

Bolivian tin exports.—According to reports given out by the Bolivian customs authorities, that country exported 23,499 tons of tin during 1911, a gain of 2,000 tons over 1910.

Copper exports.—During 1911 Chile exported 15,035 tons of fine copper, against 17,897 tons for 1910, but during January of 1912 the exports of copper exceeded those of the same month in 1911 by 1,000 tons.

The Chilean tobacco crop promises well for 1912, and will be amply sufficient to supply the demand, save for some special brands and grades. The imports of tobacco, cigars, and cigarettes for 1910 amounted to 1,685,840 pounds.

Consul Edwin S. Cunningham, of Bombay, India, reports that *cassava* is in great demand as a foodstuff in that country and that the present price is \$1.45 to \$1.78 per hundredweight (112 pounds). The only form in which cassava is sold in that country is in flakes.

EFFECT IN INDIA OF ENGLISH COAL STRIKE.

[From Consul General William H. Michael, Calcutta, Mar. 7.]

The effects of the coal crisis in the British Isles are being felt in India. Steamers at Calcutta are unwilling to take cargo for England, to keep clear of the trade disturbances there, and a congestion of export cargo at this port may result. Steamers leaving Calcutta are also taking 30 per cent more bunker coal than customarily. No loaded ships have been unable to depart from this port owing to lack of coal, but they are not able to fill their bunkers as quickly as formerly.

There has been a strong demand for coal from other ports of India and Ceylon, which the Bengal collieries have been unable to supply, as the local demand for coal has increased during the past four or five months, owing to the flourishing condition of manufacturing. In Bombay the cotton mills have recently been very busy, owing to the brisk tone of the Chinese yarn market. The only remedy for the coal shortage at the other ports is said to be the placing of more cars on the railways. There are large stocks on hand at the mines.

At Bombay there is a coal famine, and shipping rates are much inflated. Some inquiries were received there for Bengal coal for use in the British Isles, but the Indian supply is insufficient for the home demands. Shipping rates from Bombay and Calcutta to the British Isles have risen from \$3.60, the normal rate, to \$5.28, and along the Madras coast to \$7.92. There is a demand at all ports for steamers, after the depression of the previous four years, and the tonnage all over the world is well distributed. The number of vessels at Karachi is unprecedented for this time of the year.

GOLD IN WYOMING COAL.

An interesting feature about the coal mined at Cambria, Wyo., is that it is claimed to be gold-bearing. Some of the coal has contained as much as \$2 per ton in gold, and the coal was sold for only \$1.50 per ton. When coke made at Cambria was selling for \$3.50 per ton samples were taken from 31 cars during a period of three weeks and assayed. The samples showed an average of \$2.46 per ton in gold and \$0.28 in silver. The explanation offered for the presence of gold in this coal is that the sands which submerged the old peat bog and now form the roof of the coal bed were derived in part from gold-bearing alluvium. While the sand was being deposited the gold worked down into the underlying bog and is now found in the coal.

This is one of the interesting statements made in a report to be published in a few days by the Geological Survey. It is Bulletin 499, entitled "Coal near the Black Hills, Wyoming-South Dakota," by R. W. Stone, and may be had free on request to the United States Geological Survey, Washington, D. C.

American Farmers in Alberta.

An official of the line says that "in Alberta lands alone, the sales of the Canadian Pacific Railway in the last two years have amounted to more than \$10,000,000 each year, 85 per cent of the land sold having been taken by farmers who came from the United States."

SUPPRESSION OF COMPANY STORES IN FRANCE.

[From Consul Carl Bailey Hurst, Lyon.]

On March 24, 1912, the following law, affecting certain classes of employees and employers, whether native or foreign, individual owners, companies, or railways under State control, went into effect:

Every employer in France is prohibited: (1) From having in connection with his establishment a store, business, or arrangement enabling him to sell directly or indirectly, to his operatives and employees or to their families, provisions and merchandise of any kind whatever; (2) from obliging his operatives and employees to spend their wages in whole or in part in stores indicated by him.

This interdiction does not apply to a formal contract between operative and employer if the contract stipulates that the operative will be lodged and boarded and will receive, in addition, fixed wages in money, or if the employer in meeting the terms of the contract allows the operative materials for his work at cost price.

A system of purchase and sale existing between employees and railroads under control of the State will not be affected by the present law, subject, however, to a threefold condition: (1) The personnel shall not be compelled to buy of the railroads; (2) the sale of provisions and merchandise shall bring no profit to the employer; (3) the stores where such goods are disposed of shall be managed by a commission, at least one-third of whom are delegates elected by the workmen and employees of the line.

Furthermore, the Minister of Public Works shall, five years after the promulgation of the law, consult, in a manner to be determined by a ministerial decree, the personnel of each railroad as to the suppression or the maintenance of sale annexes.

The same rules will apply to manufacturing establishments conducted by companies in which the greater part of the capital is held by the workmen and employees thereof, whether pensioned or not, and the general assemblies of which are composed by statute of more than one-half of such members.

The official work inspectors are directed to supervise the execution of the present law.

Every infraction of the articles just cited will be punishable by a fine of 50 to 2,000 francs (\$9.65 to \$386), which will be increased to 5,000 francs (\$965) in case of a second offense. Certain provisions of the French penal code are likewise applicable in determining sentence.

TOBACCO PRICES IN ENGLAND.

[From the London Financial Times.]

The ruling prices for tobacco leaf practically constitute a record for dearness, and, notwithstanding the temptation which they would seem to hold out to growers to increase their acreage, there is very little prospect of expansion of production. This is attributable to the increased cost of production, and particularly of labor. In the United States the increase in this respect has been very substantial. For several years past cotton has been offering superior inducements to the grower, with the result that considerable areas previously devoted to tobacco are now planted with cotton.

Last year's severe drought, which was practically world wide, had an inimical effect on the supply as well as the quality, while the consumption continues to increase in practically every quarter of the globe. Even in England there are signs of a recovery from the effects of the increase in the duty of 8d. (16 cents) per pound in 1909. In 1911 the consumption of unmanufactured tobacco was 101,110,000, as compared with 96,184,000 pounds in 1910 and 94,557,000 pounds in 1909. The current year has not made such a promising start, as the consumption of unmanufactured tobacco in January was 7,933,000 pound, a decrease of 480,000 pounds from the same period in 1911.

The annual report of the Imperial Tobacco Co., recently issued, would appear to afford conclusive evidence of a strong recovery in the consumption, but possibly the success of that great combine has been attained at least partly at the expense of its smaller competitors. At any rate, during the past two years no fewer than 43 tobacco manufacturers have disappeared from the trade, and in well-informed quarters it is believed that this process of elimination is not yet at an end.

Lava blocks from Vesuvius were used for paving the streets of Naples, and Vice Consul J. S. Armstrong, jr., says their present condition is fairly good.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8551. Gasoline or kerosene engines.**—Consul General Louis H. Ayme, of Lisbon, Portugal, reports that a number of bids were received from the United States for the pumping and electric installations in connection with the projected dock improvements at that port, and the contractors were much impressed with the bids. The contractors now ask for proposals on gasoline or kerosene engines each of 150 horsepower to be coupled direct to electric generators to develop 150 to 200 kilowatts of electricity at 120 volts direct current. Fullset particulars, blue prints, etc., should be furnished; net and gross and dimensions of each part boxed for delivery in metric system; prices f. o. b. New York or c. i. f. Lisbon direct steamer; length of time from order to delivery; and expense of help, if necessary, to install. Correspondence in English or Spanish.
- No. 8552. Rubber articles and spindle oil.**—A business man in Germany requested an American consul to place him in touch with manufacturers of technical rubber articles and spindle oil in the United States with a view to represent them in that market. Catalogues and price lists should be in the German language.
- No. 8553. Radiators.**—The proprietor of a plumbing concern in France informed an American consul that some sample American radiators left at his place of business a year ago, which were later installed, proved very serviceable, and desires to get the address of firms in the United States which manufacture pressed steel radiators for steam or hot water heating.
- No. 8554. Watches.**—An American consular officer in Sweden reports that a firm in his district desires to import a cheap grade of American watches. Correspondence may be in English.
- No. 8555. Desks and oil stoves.**—The name of a firm which desires catalogues and quotations c. i. f. a certain port on cheap roll-topped desks and oil stoves was forwarded to the Bureau of Manufactures by an American consul in Turkey.
- No. 8556. Coal.**—A firm in Sweden requested an American consular officer to place it in communication with coal exporters in the United States, as the firm believes that there is a good opportunity to place American coal on that market. Quotations c. i. f. Swedish ports are desired for large and small screened, as well as unscreened steam and gas coal. Also, if possible, an analysis and description of the coal and screening and its comparison with British coal.
- No. 8557. Hardware and sporting goods.**—An American consul in Canada has forwarded to the Bureau of Manufactures the name of a person who has had extensive experience in the hardware business and who desires to represent American exporters of hardware and foundry and sporting goods.
- No. 8558. Leather and rubber belting.**—An American consular officer in Canada reports that a firm in his district wishes to secure the agency of a good line of American rubber and leather belting for the Province.
- No. 8559. Outdoor amusement devices.**—American manufacturers of amusement devices such as merry-go-rounds, camera obscura, mystic mazes, and illusionary articles for side shows are requested to send their catalogues and price lists to an American consul in Africa whose name is on file in the Bureau of Manufactures.
- No. 8560. Kerosene oil.**—An American consul in India has forwarded the name of native who has had 12 years' experience in the oil business and who wishes the addresses of American firms in a position to supply kerosene oil in bulk and in tins.

Consul William C. Magelssen, of Melbourne, Australia, has forwarded a 2,935-page directory of the State of Victoria for 1912, including the city of Melbourne and its suburbs, which is on file at the Bureau of Manufactures.

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PROGRESS OF THURINGIAN INDUSTRIES.

[By Consul General Frank Dillingham, Coburg.]

The high expectations of the exporters of this German industrial district were, as a whole, realized during 1911, the total exports to the United States and possessions having shown an increase of \$443,273 over those of 1910 in spite of a decrease in the exports of balata belting, steel balls, and ball bearings. The competition offered by American makers of certain classes of toys, dolls, and masks also tended to cut down the increase in the export of such articles to the United States.

There was a large decrease in the exports of electrotechnical articles because of American home production, which, aided by reduced prices of raw materials, is rapidly assuming greater commercial importance. A slight increase was made in the exports of all products of the porcelain industry, except in hand paintings, which dwindled to almost nothing. There was a good and steadily growing demand for porcelain stoppers for bottles, and new orders now on hand indicate a satisfactory business during 1912.

Growing Doll and Toy Trade.

The exports of dolls and toys from this consular district alone are almost 50 per cent of the total export of these articles from the entire German Empire and were valued at \$2,582,752 in 1909, \$2,709,884 in 1910, and at \$3,411,296 in 1911. The 1911 statistics for all Germany are not yet available, but they will probably show a large increase and should approach the record mark of \$7,516,516 set in 1907. The total German export of these goods in 1909 was \$5,936,196, and in 1910, \$6,741,826.

Stuffed toys proved to be special favorites last year, and the sale of "Teddy bears" even increased. At the beginning of the year a new apparatus for imitating the voices of animals, called "Rueckenstimme," was put on the market and met with great favor. This is placed in the backs of fur and plush animals and works when the animal is stroked. The makers of ships found a good market, and show-window figures, run by clockwork, intended for advertising pur-

poses, met with good sales. Business in Easter articles showed little change from 1910, and most orders were filled promptly. The sales of Easter toys increase every year, newer and richer novelties constantly make their appearance, and new materials are continually being used in their manufacture. The article most fancied in this line was a hare that could lay eggs. Satisfactory orders for Halloween articles, which are exported only to the United States, were received during 1911. Instead of making all the articles of papier-mâché, as heretofore, a number were made of cardboard stamped into the desired shapes, these being more durable and cheaper to produce.

The better class of Christmas and Easter articles, made of fine material and of first-class workmanship, are being more and more sought after, while the sale of the cheaper articles, which formerly predominated, is gradually decreasing. On the other hand, it has been noticed that in the doll industry the demand for wares of the better class is decreasing. Sales in this branch in 1911 remained about the same as in 1910, although there was a good demand for stuffed dolls. Serious competition is being met in the United States, where large quantities of dolls are now being manufactured and sold at very low prices. Dolls' clothes are also being made in increasing quantities in America. The "character doll" has not met with as large sales in America and England as was expected, and the German market is, therefore, the principal purchaser.

Higher Cost of Living and of Raw Materials.

Although the prices of the principal materials that are used in manufacturing toys fluctuated repeatedly, that fact did not have any special influence on the selling prices. The only marked increase was in the prices for papier-mâché goods, in consequence of which many articles made of this material were not obtainable. The increased cost of living during the year led to higher wages and prices in the factory and "house industry," and the combined manufacturers and employees engaged in the manufacture of glass eyes for dolls have been compelled, in consequence of the enormous increase in the prices of raw materials as well as of the necessities of life, to increase the prices of their productions for the time being. This increase varies from 25 to 100 per cent. During the last half of 1911 the price of ether, which is used in the doll industry, advanced 33½ per cent, while prices of cardboard, colors, and leather also increased. Rubber and silk were somewhat cheaper, while contracts for cotton goods were, in some cases, made at prices 10 per cent lower than in 1910.

Porcelain Industry—Dolls' Heads—Table China.

In discussing the reports made at a recent meeting of the Association of Ceramic Factories in Germany, the chairman called special attention to the fact that, in spite of overproduction in this branch, the extension of existing factories and the building of new factories were being carried on, and that capital could not be warned sufficiently against these undertakings, because it could be assumed as a certainty that these could not possibly make the expected profits.

The demand for dolls' heads was brisk throughout the year. Male employees in this branch were always obtainable, but female employees were difficult to find. It was partly due to the efforts of the Association of German Porcelain Factories that manufacturers were able to maintain the prices of their goods. No important changes

were noted in prices of raw materials, but the prices of the middle and poorer grades of Bohemian brown coal decreased \$1.19 per wagonload in order to meet the competition of German brown coal briquets, which are being used by the industry to a greater extent every year.

Business in the table-china branch was satisfactory, and the total exports from the German Empire should exceed those of 1910 by \$750,000. The exports in porcelain and stoneware from this consular district alone to the United States and possessions in 1911 carried a value of \$818,511, as compared with \$735,722 in 1910. Prices of materials used for packing purposes, such as wooden cases, straw, hay, and excelsior, have increased 10 per cent within the last few years.

Glass Instruments—Christmas-Tree Ornaments—Other Glass.

The Thuringian house industry does a large foreign business in glass instruments, especially with Austria, where it is able to successfully compete with the Austrian factories. This is partly due to the fact that Austrian manufacturers are compelled to import all their material for the production of glass instruments, and partly to the low rate of duty charged on this variety of goods from Germany. The exports to the United States from this district during 1911 remained about the same as in 1910.

The sale of glass Christmas-tree ornaments is increasing from year to year, but the prices remained stationary until recently. The greater part of the 1,600 or more men engaged in the manufacture of glass ornaments in the Thuringian Mountains have, however, joined the Central Association of Glass Workers of Germany, with headquarters in Berlin, and have raised their prices from 20 to 30 per cent. Several of the largest wholesale houses in this district have refused to pay this large increase, and business is, therefore, practically at a standstill.

There was a large demand in 1911 for glass tubes, because of the increased production of Christmas-tree ornaments, for which they are chiefly used. The use of tubes for pharmaceutical, chemical, and technical purposes is also increasing. In consequence of a threatened strike last summer among the workers in the glass factories, when there was a scarcity of tubes on hand, the factory owners increased their wages.

The syndicate of glass-marble manufacturers has increased its prices about 10 per cent since December 1, 1911. The exports of glass and wax beads and artificial pearls from this district increased from \$20,300 in 1910 to \$74,100 in 1911. This tremendous increase was probably due to the use of beads in late styles of robes, etc.

Glass Eyes—Belting Factory in America.

Although large quantities of glass eyes go to the United States, they are sold at such low prices that the value covered by an invoice rarely amounts to \$100, and the shipments do not appear in the consulate's export returns. The annual production of these glass eyes in the town of Lauscha, 25 miles from Coburg, is estimated at 150,000, having a value of \$17,000 to \$19,000. Business in this line was bad in 1911, due to unsettled conditions and to the increase in the cost of necessities of life. Manufacturers were compelled to reduce their production in part and give their attention to the manufacture of other glass articles. It is reported that a few of these manufacturers

have gone into job manufacturing, each manufacturer making a certain portion of each eye and then passing it on to others who finish other parts, the last one putting on the finishing touches. In this way the quantity of eyes produced is greatly increased, although the quality deteriorates. In order to make the eye thoroughly satisfactory from a surgical and anatomical standpoint, it should be made throughout by one and the same trained worker, because in this way only can eyes for human beings be produced to equal the natural eye in color and form.

Exports of balata belting from this district to the United States ceased altogether after the first quarter of 1911, because the only firm in this consular district that manufactures this article erected a branch factory in the United States last year, and all American orders are now filled there.

Beer Export Decreased—Basket Ware—Steel Balls.

A slight decrease in the exports of beer is noted for 1911, although the brewing of beer in Thuringia increased from 61,027,385 gallons in 1910 to 61,429,405 gallons in 1911. With a population of 1,580,356, this amounts to 38.9 gallons per person, compared with 38.6 gallons the previous year. In the Province of Saxony it amounts to 17.7 gallons per person, against 16 gallons in 1910; in the Kingdom of Prussia to 18.3 gallons, against 18.5 gallons in 1910; and in the Kingdom of Saxony to 21.9 gallons, against 21.6 gallons in 1910. According to these statistics Thuringia stands at the head.

Exports of basket ware increased somewhat in 1911, the greater part of the articles being hampers, wash baskets, market, fruit, and candy baskets. A number of expensive baby baskets were also sold.

The exports of steel balls and ball bearings showed a decrease of about 45 per cent in 1911, probably due to the fact that American importing firms still had a large stock on hand from the previous year, when record shipments were made from this district. The demand for these articles seems to be increasing again this year, and a better business is confidently expected.

Declared Exports to the United States.

The exports to the United States from this district during 1910 and 1911, as indicated by the invoices certified at this consulate, were as follows:

Articles.	1910	1911	Articles.	1910	1911
COBURG.			COBURG—continued.		
Balata belting.....	\$115,747	\$11,287	Woodenware.....	\$30,821	\$36,248
Baskets.....	292,443	306,810	All other articles.....	172,342	159,250
Beer and brandies.....	99,896	89,306			
Dolls and toys.....	408,136	378,219	Total.....	2,676,962	2,328,922
Glass beads (artificial pearls).....	19,357	68,560	SONNEBERG.		
Glassware.....	148,500	143,103	Dolls and toys.....	2,301,638	3,032,421
Guns.....	38,677	25,556	Masks.....	13,958	10,078
Hops.....	243,754	189,315	Porcelain and stoneware.....	229,808	268,506
Porcelain and stoneware.....	502,542	531,639	All other articles.....	19,270	40,983
Rags.....	23,150	33,455			
Steel balls and ball bearings.....	572,627	347,004	Total.....	2,564,674	2,392,313

The exports from Coburg to the Philippines during 1911 consisted of \$365 worth of porcelain and stoneware, as against shipments of metal ware, porcelain and stoneware, and post cards of a total value

of \$3,787 in 1910. Paper ware to the value of \$235 was sent to Hawaii from Coburg in 1911. The only exports to Hawaii in 1910 were dolls and toys, valued at \$110.

Rising Prices of Foodstuffs.

Although the demand for foodstuffs was good, the wholesale and retail dealers had to contend with a sudden rise in price of nearly every article. Raw Santos coffee rose from 10½ cents per pound, f. o. b., Hamburg, duty extra, in January, 1911, to 14½ to 15 cents in February, 1912. This article is said to be in the hands of speculators, so that no reduction can be expected for the time being. These exceptionally high prices force the public to drink more substitutes, such as malt and barley coffee. Higher prices are also paid for rice and spices. The unusual heat of the summer of 1911 greatly affected the beet crop, so that beet-sugar prices have advanced 50 to 60 per cent since last June. The pea, bean, and potato crops were also nearly ruined, and prices are about 50 per cent higher than they were a year ago, while all potato manufactures, starch, sago, potato flour, etc., cost 50 to 60 per cent more than at the beginning of 1911.

Railroad Projects.

Coburg is to have a new railway passenger station, which, including new tracks, freight yards, etc., will cost almost \$1,000,000. Work has already commenced on the freight yards, and as soon as it is advanced enough the present passenger depot will be razed. It is thought that the undertaking will be completed by or before 1915. The branch railway line from Coburg to Lauscha, a distance of 25 miles, is being extended over the highest part of the Thuringian Mountains to Bock Wallendorf, where it will meet a short branch line running to Probstzella, situated on the main line from Munich to Berlin. Stations will be erected at Lichte, Ernstthal, and Neuhaus am Rennweg. A tunnel is now being bored through the mountain "Lauschenstein," behind Lauscha, and will come out a little below Ernstthal. This line will run through the heart of the mountain "house industry" district and will be a great stimulator of trade, as it will supply an outlet for articles made by the house industry in all the small villages in the sparsely populated mountain districts. These goods have heretofore been carried for miles and miles on the backs of men, women, and children, who have walked every Saturday afternoon to Lauscha or Neuhaus to deliver their week's work to the different purchasing firms in those towns. This house industry has grown from year to year in spite of the lack of railroad communication, and it is safe to predict that it will increase very much after the new railroad is completed. Most of the products of the house industry are exported to America, and consist mainly of dolls and toys.

General Condition of the Working People.

The average German wage earner endeavors to have a small plot of land, either in the front or rear of his cottage, on which he can raise potatoes. The country houses or cottages of the working people in this part of the Empire, especially in Thuringia, are usually built of red brick, each house containing two or three small rooms besides the kitchen, which, being the general living room, is made much the largest room in the house. In the basement, or in a room at the end

of each house, one sees a cow or horse, or both, and frequently a pig or two and fowls. These conditions also apply to every farmhouse.

The method of workmen's insurance, which went into effect some years ago, by which a workman can insure himself, or an employer his employee, deducting the premiums from his daily wages, has worked well and has given satisfaction.

Industrial Education.

There are a number of industrial schools in this consular district where young people can learn such drawing, modeling, painting, and wood carving as will be of use to them in the toy and china industries. In the toy industry there are no apprentices, young people, as soon as they leave school, being engaged in the different branches at fixed wages. The desire is sometimes expressed that employees be first compelled to serve an apprenticeship of several years, and one employer reports that it is extremely difficult to obtain apprentices, as political organizations agitate against such service. Even if experienced men from other industrial branches should enter the toy industry, their knowledge would be of little use to them, and they would have to commence in a toy factory and learn the trade from the bottom. In mask making there are no apprentices, nor is it considered that there is need of trained employees.

In the manufacture of dolls' heads experienced workmen are not needed, as the work to be done can be learned in a short time. The same applies to the manufacture of technical and electrotechnical articles. There is a need for experienced workers in the manufacture of tableware, vases, and figures. The young employee entering this branch is so trained that at the end of his four years' apprenticeship he can easily find a job as a trained workman. It is not possible for workmen experienced in other branches to obtain a position in such a factory without first learning the new trade in the factory itself.

Boys leaving school at the age of 14 are employed in the glassworks as carriers, executing only the simplest tasks, for which they receive about 24 cents a day. After about six months they are allowed to work as glass-tube pullers and marble-makers, and at the age of 15 or 16 often earn \$3.50 to \$4.75 a week. The same conditions hold in the glass-blowing department. Some regard this method of training as insufficient, as it aims essentially only at obtaining sufficient wages for the apprentice as soon as possible.

Opportunities for American Goods.

First-class goods and perfect packing are essential to the extension here of American trade. European competitors, with trained representatives speaking several languages and granting long credits, have a strong advantage over American firms, whose travelers often speak indifferent German or no German at all and who insist upon immediate payment. In spite of these handicaps a distinct increase in the imports of American goods into this district has been noted in the past two years, most of which are made through large importing firms in Berlin, Bremen, and Hamburg.

Large shipments of American apples are supplying the local market; at 16 to 18 cents a pound. These prices impress the average Coburg purchaser as extortionate, but the demand is good and will continue so until the next local crop is marketed; as without them the market

would now be practically bare of apples. Canned vegetables have been used largely the past winter, there being a very limited supply of fresh ones in consequence of the crop failure in 1911. Meats of all kinds have also been scarce; and if the obstacles now existing against those from the United States could be removed, beef and mutton especially would find a large market throughout the Empire. A number of chambers of commerce are now advocating the admission of American meats, the Coburg Chamber of Commerce having initiated the movement. As few direct importations into this district are made from the United States, it is impossible to give even an approximate idea of the value of American goods consumed here, but this is increasing, and there is every reason to believe that it can be increased by a careful and systematic canvass.

GUANACOS OF THE ANDES.

[From Consul Alfred A. Winslow, Valparaiso, Chile; see also Daily Consular and Trade Reports for Sept. 14 and Nov. 22, 1911.]

Texas ranchmen seek additional information concerning guanacos, which are found in large numbers in the Andes from central Peru to Cape Horn. These animals are very shy and hunters capture them with difficulty. They may be tamed if taken when young, and I see no reason why they could not be successfully raised in certain sections of the United States. Guanacos are said "to feed upon the pungent herbage of the Patagonian deserts, as well as upon the bitter grasses of the Pampas, and furnish to the wandering natives their principal flesh food and the only skins useful for clothing or tent making, except those of the rheas. Over a large part of their habitat none but salt water is to be had, which they drink readily."

Guanacos are about a third taller than the average sheep and weigh about the same. There is no fixed price for the animal, as few have been domesticated. They must be picked up wherever they can be found, at whatever the owner may charge, anywhere from \$6 to \$20 gold each. For further information interested persons might address the American Consul at Punta Arenas and the American Consular Agent at Antofagasta, at which points I am told the domesticated animal is better known than any place else in Chile.

Guanaco rugs are prized very highly here and cost \$16 to \$25 gold, according to size, quality of the hair, etc. A rug 6 by 9 feet is worth \$20.

CHINESE USE OF MELON SEED.

[From Consul General Amos P. Wilder, Shanghai.]

Watermelon seeds are used as a delicacy in China, being served with tea and also at meals much as in the United States salted almonds are served. Watermelons are abundantly grown and in this part of China are, in season, on sale at every fruit stand and peddled about the streets, cut in small portions for immediate consumption by the myriads who buy. There should be ample seeds to supply the demand. Indeed, it seems there are more, for in 1910 China exported 7,458,000 pounds of melon seeds to countries where large Chinese settlements exist, principally to Hongkong. Their value was \$296,215, or a trifle less than 4 cents per pound.

CLOTHING MANUFACTURING INDUSTRY.**GERMANY.**

[From Consul Samuel H. Shank, Mannheim, Germany.]

Lockout of German Tailors—Wages Paid.

A lockout against all union workmen was declared by the General German Employers' Union for Tailors on March 9, 1912, as a result of the failure of workmen who had been on a strike in 30 cities to accept the wages offered at the meeting of the arbitration committee at Frankfort on the Main. The workmen demanded a wage increase of 20 per cent and the employers offered a raise of about 5 per cent, the highest being 7 per cent, offered in Berlin. The employers' organization has branches in 158 cities, with 2,500 members. More than 24,000 workmen are affected by the lockout. While the nonunion men were not locked out, many of them have quit work.

Employers are divided into four classes and pay wages according to their classification, the wage tariff being different in each city. The prices paid in Mannheim for making an evening dress coat are: Class 1, \$5.95; class 2, \$5.47; class 3, \$5.12; class 4, \$4.76. Additional charges are made for trying on, changes, trimming, etc., bringing the total wage cost up to about \$7 for class 1 and \$6.50 for class 2. The wages for repair work for classes 1 and 2 are 13 cents an hour, the hours being from 7.30 to 7.30, with 1½ hours at noon and 15 minutes for coffee in the forenoon and afternoon.

Strike Benefit Funds.

Each workman pays a weekly fee of 12 to 24 cents to his union, receiving during a strike a weekly payment of \$2.85 if unmarried, \$3.80 if married with no children, and \$5 if married with three children. Each member of the employers' union pays 5 pfennigs (1.19 cents) weekly into the strike fund of the employers' union for each workman employed, and during a lockout receives 28 cents a day for each workman for whom he has paid. This is done to help some of the smaller tailors, who could not otherwise withstand a strike. This payment, however, does not start until the fifth day of a strike or lockout. As soon as the funds of one organization or the other are exhausted the parties are usually ready to arbitrate. The present strike has lasted (Mar. 19) 10 days, and the workmen have received one payment. It is estimated they have funds for three more payments, and no settlement will probably be reached until this fund is exhausted.

ENGLAND.

[From Consul Benjamin F. Chase, Leeds.]

Leeds Supplies England's Home Market—Growth of Clothing Exports.

Clothing for men, women, and children is made at Leeds, but only a small portion of the output enters the foreign trade, as this city supplies the bulk of the ready-made clothing sold in the United Kingdom. The cheaper grades of cloth made here are thus used for home consumption. Ready-made clothing for the export trade is produced chiefly in London and Bristol. The wages paid in Leeds are about 12½ per cent higher than in Bristol, and 15 per cent higher than those paid in London, according to a local paper. Glasgow pays a slightly higher wage than Leeds and caters to Scotland and northern England. Under the trade boards act the tailoring trade

board has fixed the minimum hourly wage for journeymen tailors at 6d. (12 cents) and for women at 3½d. (7 cents). About 85 per cent of the 20,000 workers in this trade in Leeds are women. Austria is the strongest competitor met in the foreign trade, and Germany supplies her own colonies and part of the South American trade.

A British trade journal recently published statistics for the clothing trade during the past 55 years, showing that the average annual exports of clothing from the United Kingdom, by five-year periods, were \$10,327,000 from 1857 to 1861, \$13,096,000 from 1862 to 1866, \$11,509,000 from 1867 to 1871, and then rose steadily to \$29,029,000 for 1907 to 1911. The net imports during the last five-year period amounted to \$13,753, leaving the average annual net imports \$15,276,000.

The average annual exports to all countries, except Japan and the British possessions of South Africa and Australia, during the years 1906 to 1910 showed increases over the average of the preceding five years. The average exports to Japan remained the same for both periods, \$63,000, while those to South Africa declined \$1,046,000 and to Australia \$1,168,000. The greatest increases in exports were to France, Holland, Argentina, and Egypt.

UNITED STATES.

[From report of the United States Census Bureau.]

Output of Men's Clothing and Shirts.

The preliminary figures of the Thirteenth Census of establishments engaged in the manufacture of men's clothing and shirts shows that the value of the output of this trade increased from \$406,768,000 in 1904 to \$568,077,000 in 1909. This total includes the manufactures of men's, boys', and children's clothing, overalls, market frocks butchers' aprons, uniforms, bathing suits, knee pants, gymnasium and sporting clothes, and shirts and shirt waists. The following comparative summary gives the figures for 1904 and 1909:

	1904	1909	Per cent of in- crease, 1904-1909.
Number of establishments.....	5,148	6,354	23
Capital.....	\$176,557,000	\$275,320,000	56
Cost of materials used.....	\$211,433,000	\$297,515,000	41
Salaries and wages.....	\$84,199,000	\$133,000,000	58
Salaries.....	\$15,740,000	\$26,723,000	70
Wages.....	\$68,459,000	\$106,277,000	55
Miscellaneous expenses.....	\$64,146,000	\$83,007,000	29
Value of products.....	\$406,768,000	\$568,077,000	40
Value added by manufacture (products less cost of materials).....	\$195,335,000	\$270,561,000	39
Employees:			
Number of salaried officials and clerks.....	15,671	22,220	42
Average number of wage earners employed during the year.....	173,089	230,096	33
Primary horsepower.....	29,829	42,725	43

New Directory for Panama.

A new directory for the cities of Panama and Colon is being prepared by certain Americans at Ancon, Canal Zone. When the book is available, Consul General Alban G. Snyder, of Panama City, states that he will procure copies for those desiring them. If there is to be a charge therefor, the amount will be announced later.

DEVELOPMENT IN EAST INDIES.

[Abstracts from reports by Commercial Agent for the State of Victoria, forwarded by Consul Wm. C. Magelssen, Melbourne, Australia.]

Java and the Celebes.

The three principal cities, Batavia, Sourabaya, and Samarang, each furnish evidence of the wealth following increased production in Java. The artificial harbor of Tanjong Priok, the port of Batavia, excavated and constructed some years ago at great cost, is proving inadequate and is to be doubled in extent. Many new buildings have been erected or are in course of erection in the commercial part of Batavia.

Sourabaya, the chief commercial city, is having a new dock and harbor and quite a building boom is taking place; large numbers of new warehouses, banks, and residences are in course of construction. In Samarang also the same change is taking place.

The Celebes, the trade of which is largely done through Java, are to be opened up by roads and railways. The trade development of Borneo and the large group of smaller islands of the Dutch Indies is evidenced by the fleet of small steamers running to them seen in the ports of Java.

Island of Sumatra.

Dutch people who have traveled over a great portion of Sumatra declare that it is quite as fertile as Java and has an immense area of country, undeveloped on account of lack of railways, roads, and labor. The Government of the Netherlands Indies has, however, decided to build a railway through the entire length of the island which will link on to several coastal lines now in existence. Survey parties are now engaged in determining the route of the proposed line.

Within 80 miles of Medan is the chain of mountains which intersects the island. In this there are table-lands, with a cool, temperate climate, 4,000 to 5,000 feet above sea level, a great asset to a large tropical island. The Government has recently constructed a motor-car road so that residents of Medan can proceed in half a day to this table-land, and it is proposed to have residences built there. In the southern portion of the island there are two rich quartz mines, which have large plants of modern machinery and are now large producers of gold. Other places at present inaccessible are reported to be rich in minerals. On the west coast, in the mountains, there is an extensive coal mine which furnishes large supplies of coal for the railways in Java. A railway from Padang, a town and port on the west coast, extends inland for a considerable distance, and a branch line furnishes the coal mine means of transportation. On the east coast, several large oil companies have been operating for a number of years, and great quantities of oil are exported by them.

The opening up of this island by railways will bring about the rapid internal development of its resources.

The Federated Malay States.

I have succeeded in having Victorian plows and cultivators introduced into the Malay States, but the chief demand has been for disk cultivators light enough to be drawn by two bullocks, which are only equal in strength to one horse. During the past year a very considerable number of these have been imported and they have done good work on rubber estates from which the timber and stumps have been cleared. They are chiefly used for keeping the land clear of grass and weeds. One of the largest rubber plantation companies near Malacca is at present plowing up and planting 5,000 acres of lalang grass country, which has been cleared of timber. The grass, from 2 to 3 feet in height, was first cut with mowing machines, and burned. They commenced operations with Victorian 2-furrow plows drawn by bullocks, and the land broken up was subsequently gone over at right angles with disk cultivators, and then the rubber planted. During the past year, however, heavy traction engines and an equipment of large reversible 7-furrow disk plows, scarifiers, and wire cables were imported from England. These have been at work now for several weeks, and when in Malacca I visited the estate and saw them working. The engines were stationed at either end of the land to be broken up, and a wire cable a quarter of a mile long pulled the 7-furrow disk plows. Although the field had an irregular surface, excellent work was being done at the rate of 10 acres per day. After a large block of land was plowed and soil exposed to the sun, it was cross plowed, and this after a time was harrowed by traction power also, and then the rubber planted. The work done was excellent, the soil well broken up, and the lalang destroyed. I was informed that the cost of tillage, \$5.70 (American currency) per acre, was \$2.80 less than that done by bullocks under the other system. The success of this method of breaking up lalang land will no doubt lead to its adoption in other places.

In keeping weeds and grass down in planted areas one large company near Malacca has 200 disk cultivators (8 and 10 plate) working, all drawn by pairs of bullocks. The cultivators used throughout the Malay States are of Canadian or Victorian manufacture. The agents for the former have been making every effort to secure trade. On a number of estates hand labor and the use of a large hoe are adopted for clearing plantations of weeds. The Victorian tree and stump extractors, for clearing the stumps of felled jungle which were left in the land at time of planting, are in universal use in the Malay States. These have had a large demand, and although American and other implements have been tried for this purpose those of Victorian manufacture have established their supremacy in effectiveness and utility.

NEW GOVERNMENT PUBLICATIONS.

[Announcement of Bureau of Labor, Department of Commerce and Labor.]

Settlement of Railway Labor Disputes.

Conciliation and arbitration in labor controversies form the subject of Bulletin No. 98, soon to be issued and for which applications will be listed. Recent experience in this and in a number of foreign countries under various plans is presented in a series of articles. Commissioner Charles P. Neill discusses "Mediation and arbitration of railway labor disputes in the United States, under the Erdman Act" in the first official report upon this subject; the operations of the Canadian industrial disputes investigation act and the British railway conciliation scheme of 1907 are summarized; the experience with conciliation and arbitration in Great Britain is given and the attitude of employing interests and of labor is discussed by A. Maurice Low and Arthur E. Holder; the work of the boards of conciliation, arbitration, and of sanitary control in the cloak industry in New York is reviewed by Charles H. Winslow; and the settlement of labor disputes by the industrial courts in France, Germany, and Switzerland is described by Helen L. Sumner.

Industrial Courts of France, Germany, and Switzerland.

A study of the industrial courts of France, Germany, and Switzerland, by Helen L. Sumner, Ph. D., is a feature of Bulletin No. 98, soon to be issued and for which applications will be listed. Such courts, though unused in English-speaking countries, are common on the continent of Europe. They are designed to meet the needs of workmen who frequently feel that in their relations with their employers they are the victims of small injustices and impositions, none of them individually perhaps worth the trouble and expense of an ordinary suit at law, but in the aggregate causing much bitterness and unrest. To meet this situation industrial courts are made easy of approach, proceedings are swift and informal, fees and expenses are reduced to a minimum, a lawyer's services are unnecessary and in some cases even forbidden, and a persistent effort is made to bring the contestants to an agreement rather than to impose upon them a formal decision. Their jurisdiction is limited to cases between employers and workmen arising out of their labor contract.

These courts, although established in many parts of Europe, are more generally used in France, Germany, and Switzerland than elsewhere. In France, in 1906, there were 164, which handled 45,834 cases. In Germany, in 1906, there were 469 courts, which handled 112,281 cases. The number of courts constantly increases, but there is said to be a decrease where the system has been long in operation in the number of complaints. This is accounted for in part by the increasing standardization of labor conditions and in part by the growing knowledge and understanding of the laws brought about by the courts themselves.

Improvements in Cloak, Suit, and Skirt Industry.

The working of the agreement which ended the strike in the cloak, suit, and skirt industry in New York City, with the agencies which it established—the preferential union shop, the machinery for settling disputes, and the board for improving sanitary conditions in the industry—is also a report in Bulletin No. 98. The establishment and successful working of these agencies depended on the fact that both parties to the strike and to the protocol were organized, the employers in the Manufacturers' Protective Association and the employees in various unions working together through a joint board. At the close of the strike, September 2, 1910, the Manufacturers' Association included 123 firms employing some 15,000 workers, while the unions had a membership of about 40,000.

Natural gas produced in the United States now amounts to over 500 billion feet annually.

SHADE-TREE PLANTING IN PRUSSIAN CITY.

[From Consul General Frank D. Hill, Frankfort on the Main.]

One of the pleasantest and most striking features of Frankfort is its wealth of verdure. In addition to the famous Palmengarten, the Zoological Garden, and a host of parks and squares, the "Anlagen," or parks laid out on the site of the former outer wall torn down about the beginning of the nineteenth century, encircle the center of the town. The residence part of the city is beautified by its numerous gardens, nearly all residences having a garden, often a spacious lawn, between street and house. The principal streets and highways are planted with shade trees.

The planting of shade trees is carried on under the supervision of the "Stadt-Gaertnerei," an office having charge of public parks, etc., which office furnished the following information with respect to planting and care of shade trees on streets and highways, stating that similar conditions prevail in other German cities:

The following varieties are used in the center of town: *Platanus orientalis*, *Robinia pseudacacia Bessoniana*, *Robinia pseudacacia monophylla*, *Tilia alba*, *Acer pseudo-platanus*, *Aesculus hippocastanum flore plena*, *Sophora japonica*. In addition to the above the following varieties are used in the outer districts and on highways: *Acer plantanoides Schweileri*, *Acer negundo*, *Acer dasycarpum*, *Tilia platyphyllos*, *Tilia vulgaris (intermedia)*, *Populus nigra fastigiata*, *Ulmus montana*, *Ulmus vegeta*, *Fraxinus excelsior*.

The trees are generally planted at intervals of 8 meters (26 feet). Trees with spreading crowns are set a little farther apart, while those which do not spread are planted nearer together. Trees are planted with great care. The ground is prepared by digging a hole about 6 feet square and 3 feet deep, which is filled with the earth in which the particular tree prospers. In case of drought trees are thoroughly watered once a week or once in two weeks. The branches are trimmed in winter.

[An article on the planting of fruit trees along German roads appeared in Daily Consular and Trade Reports for Mar. 12, 1912.]

PROPOSED JAPANESE-KOREAN CABLE.

[From Consul General George H. Seidmore, Seoul, Chosen.]

It appears from the following announcement in the Seoul Press that the Japanese authorities are laying a new submarine cable between Chosen and Japan:

It is stated that the Communications Department in Tokyo has decided to lay a new submarine cable between Shimonoseki and Fusan and also to lay a through wire between Nagasaki and Tokyo. The estimates for these works were presented to the Diet as a supplementary budget and were approved of by the budget committee. It is expected that both works will be started about March 10, after approval by the House of Peers has been obtained. With regard to the new cable between Fusan and Shimonoseki the Communications Department being already possessed of the cable necessary for the projected work, it is expected that the laying of it will be finished in a fortnight. The laying of the through wire between Tokyo and Nagasaki is also expected to be completed by the end of the same month, as the necessary arrangements have already been made.

In this connection we learn that there are already two submarine cables between Fusan and Shimonoseki. Besides these, Chosen and Japan are connected by a line between Wonsan and Matsuye, in Izumo Province, and another between Seoul and Osaka.

Consul General S. Listoe sends a copy of the Regulations (conditions) of the Rotterdam Grain and Seed Exchange, which may be of interest to American grain dealers. It will be loaned on application to the Bureau of Manufactures.

NOTES FROM INDIA.

[From Vice Consul General Charles B. Perry, Calcutta.] -

New cooperative store.—A Rangoon message states that a cooperative store, with a capital of \$6,665, has been started in that city for the benefit of railway employees.

Shipments of jade.—Owing to the troubles in China, which is the chief market for jade won in the mines of upper Burma, the revenue of the Burmese Government under the head of jade has fallen off in the past year by over one lac of rupees (\$32,433).

New consulate general.—A telegram from St. Petersburg states that the appointment of M. Nabokoff to the Russian consulate at Calcutta is connected with the project of raising the post to the status of a consulate general and its possible transfer to Delhi.

Indian opium sales.—At the opium sales on March 5, 1912, 810 chests Behar opium sold at an average of \$1,257, the highest price being \$1,770 and the lowest \$630. The 960 chests of Benares opium averaged \$880, the highest price being \$1,700 and the lowest \$630.

Departments of Government.—It is understood that the Viceroy has decided that all departments of the Government of India except Finance and Comptroller General, should remain in Simla until January next, the Finance and Comptroller General's Departments removing to Delhi next October. It is believed that by next January arrangements will be completed at Delhi for the accommodation of the other departments of the Government of India.

Palmyra fiber.—According to the office of the Director General of Commercial Intelligence, there are practically no exports of palmyra fiber, used in the manufacture of brooms and brushes, from Calcutta. The quantity of these commodities exported from British India during the fiscal year 1910-11 was 64,169 hundredweight, of which 106 hundredweight were shipped from Sind and 64,063 hundredweight from Madras. Palmyra-fiber extraction is for the most part a Madras industry.

Rice crops in Far East.—The first foreign customer this season to make purchases of Burma rice was Japan, the quantity exported to that country from the first of January to the first of March amounting to 16,000 tons against 5,400 tons in the corresponding period of last year. Java has already taken 55,000 tons of rice from Rangoon, the Straits Settlements and China have been indenting largely on Burma, and in view of last year's stocks being practically exhausted there is danger of injudicious exportation from Burma. The local production of rice in Shanghai has been severely interfered with by the troublous conditions in China, and in order to augment internal supplies a heavy demand is certain to be made on outside sources. In Siam the condition of affairs is deplorable, perhaps unprecedented in the history of that country. It is expected that only 40 per cent of a normal crop will be obtained. Bad crops are the indication all over in the Far East.

Consul Harry A. Conant, of Windsor, Ontario, Canada, reports that the growing of seed corn for the market is attracting much attention in the vicinity of Amherstburg, in that consular district.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8561. Store fixtures and supplies.**—An American consul in Mexico forwarded to the Bureau of Manufactures the name of a firm which is about to open a large retail store in his district and desires to buy a complete assortment of men's, ladies', and children's shoes, rubber and celluloid novelties, fancy dress goods, etc.; also wants catalogues of modern store fixtures. The firm expects to pay cash for purchases.
- No. 8562. Cocoa.**—A company in Jamaica has requested an American consular agent to place it in communication with dealers in the United States who desire to purchase high-grade cocoa directly from the company. Arrangements are being made to install modern machinery.
- No. 8563. American goods for Germany.**—An American consular officer in Germany forwarded the name of a firm in his district which wants to represent American firms in margarin and similar products, liquors, meat, and meat products, or manufactured goods of any kind. References accompanied the request.
- No. 8564. Metal polish, graphite, oils, and greases.**—A Canadian firm requested an American consular officer to place it in touch with manufacturers of metal polish, graphite, and oils and greases in the United States with a view to representing them in one of the Provinces.
- No. 8565. Antimony.**—A Russian merchant located in China, who is interested in antimony mines, informed an American consular officer that he is desirous to establish connections with buyers or users of antimony in the United States.
- No. 8566. American flags and bunting.**—Catalogues and price lists of American flags of all sizes and bunting are requested without delay by a firm in Austria whose name was forwarded by an American consul. The consul states that a large number of Americans are expected to participate in the Sokol exercises held in June, and that American flags and bunting will be in demand.
- No. 8567. Leather and imitation.**—An American consular officer in Canada reports that a business man in his district desires to purchase American leather and imitation leather for upholstering, bookbinding, and other purposes. References are furnished.
- No. 8568. Hoisting machinery, locks, and lubricating oils.**—A business man in Austria requested an American consul to put him in communication with manufacturers of hoisting machinery, etc., for lifting bricks and other materials into buildings in course of construction; he also desires to communicate with American manufacturers of locks and lubricating oils.
- No. 8569. Wearing apparel, footwear, and groceries.**—A Canadian wholesale commission merchant, who handles American goods only, requested an American consular officer to place him in touch with manufacturers of dry goods, wearing apparel, shoes, leather goods, and groceries in the United States with a view to representing them in one of the Provinces. References are furnished.
- No. 8570. Olographic paper oil pictures.**—An American consul in Germany reports to the Bureau of Manufactures that prospective buyers in his district want the names of manufacturers of "olographic" paper oil pictures in the United States.
- No. 8571. Sporting goods.**—A business man in Canada, who has opened a sporting-goods store, requested an American consular agent to place him in touch with firms in the United States exporting guns, ammunition, fishing material, camp outfits, motor boats, and accessories, canoes, tents, etc.
- No. 8572. Dry paste.**—An American consular officer in Canada has forwarded to the Bureau of Manufactures the name of a firm which wishes to obtain the agency in one of the Provinces for a good line of dry paste for paper hanging. Reference is furnished.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 579. Department supplies.**—Sealed proposals for furnishing articles covered by the general schedule of supplies for the fiscal year 1913 (except furniture and fuel) for all executive departments and independent establishments will be received at the office of the General Supply Committee, Treasury Department, Washington, D. C., until 2 p. m., May 7, 1912. Specifications and instructions will be furnished upon application to the General Supply Committee, Union Building, Washington, D. C.
- No. 580. Electric passenger elevators.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 a. m., May 11, 1912, for installing three electric passenger elevators, one in the Naval Hospital at Chelsea, Mass., one in the Naval Hospital at Newport, R. I., and one in the Naval Hospital at Portsmouth, N. H. Plans and specifications may be obtained upon application to H. R. Stanford, Chief, Bureau of Yards and Docks, Washington, D. C.
- No. 581. Gunboat.**—Proposals for constructing by contract one gunboat (river gunboat No. 1) will be received at the Navy Department, Washington, D. C., until noon, June 10, 1912. A circular of requirements for said vessel is now ready, and forms of proposal and contract may be had on application to the Navy Department, Washington, D. C., after May 1.

MARSEILLE'S PRODUCTION AND EXPORTS.

[From Consul General A. Gailin, Marseille, France.]

The annual production of Portland cement in Marseille and immediate vicinity is estimated at 275,000 tons, including 70,000 to 80,000 tons of white Portland cement. The latter cement is used in the manufacture of artificial stone and for decorative purposes. The declared exports of white Portland cement from Marseille to the United States amounted in 1911 to \$24,332. Owing to the importance of the local industry there is no market here for the American product.

[See also Daily Consular and Trade Reports for January 3, 1912, which contains a series of articles on cement and ferroconcrete.]

American Agricultural Expert for Brazil.

The Department of Agriculture has transmitted to the Bureau of Manufacturers a clipping from the *Agricultural Student* (for March, 1912), which is issued by the Ohio State University, stating that Prof. J. H. McNeil, M. D. V., professor of surgery and obstetrics, also the veterinarian at the Ohio State University, has accepted a position as manager and inspector of cattle and meat on a 9,000,000 cattle ranch in southern Brazil.

Consular Trade Conferences.

Consul General John Edward Jones, at Winnipeg, Canada, has arrived in the United States on leave of absence, which will probably extend over several weeks. American business organizations, firms, and individuals interested in trade between the United States and western Canada desiring to communicate with Mr. Jones should address him in care of R. D. No. 4, Box 37, Washington, D. C.

THE GERMAN TRADE IN PINEAPPLES.

(From Consul General Robert P. Skinner, Hamburg.)

There is a large and growing demand in Germany for pineapples, the trade in which, as in the case of substantially all fresh fruit imported into this country, is centralized in Hamburg. Nearly all the pineapples shipped to this city are sold at auction, the supplies, as a rule, coming from the Azores. The annual importation from these islands amounts to 130,000 cases. The official statistics relating to the business are as follows:

	1910	1911
	<i>Tons.</i>	<i>Tons.</i>
Total German importations.....	1,321.0	2,255.1
From the Azores.....	1,052.0	1,929.9
Total reexportations.....	44.5	55.8
To Austria-Hungary.....	17.1	16.4
To Russia.....	6.5	12.6
Total value of importations.....	\$314,398	\$536,000

Some attempts have been made to import pineapples from Porto Rico and also from South America, but without much success, as the fruit arrived in bad condition, owing to the length of the journey. The high freight rates also discouraged importers who, nevertheless, are entirely willing to receive goods on consignment from San Juan and to dispose of them on the market under the most favorable conditions possible. It is suggested that beginners in the trade would do well to send a sample consignment of perhaps 20 cases. The fruit should be assorted so that each case contains pines of the same size. It is recommended that the interstices be not filled with hay, which keeps the fruit too warm. Leaves might be utilized as packing material to better advantage perhaps. The cases should be stored in the bow of the transporting steamer and as far removed from the boilers as possible. Markings on each case should indicate the quantity contained. Shipments from San Juan should be made via the Red "D" Line to New York, and from Florida by fast train to New York, and thence via fast steamers to Hamburg. Care should be taken that packages be made ready at the last moment possible prior to the departure of the carrying vessel.

Importers state that fruit from the Azores is grown under glass, which makes it rather expensive. They have the impression that fruit so grown is superior to that grown in the open air, a point in regard to which there may be differences of opinion. [The Florida pineapples are much improved since the slatted shed coverings were adopted.—Bureau of Manufactures.]

The prices obtained for pineapples run from 70 to 90 pfennigs (\$0.1666 to \$0.2142) per German pound (half kilo or 1.102 pounds), and Porto Rican fruit would not command as much, at least until a demonstration had been made of its qualities.

The cases received ordinarily contain up to 16 pines, although if the fruit is fine, weighing up to 6 pounds each, the cases contain only six.

[The addresses of Hamburg importers of pineapples, and of retailers supplying exclusive trade may be had from the Bureau of Manufactures.]

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

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COMMERCIAL GROWTH OF YUNNAN.

[From Vice Consul General Hamilton Butler, Canton, China.]

The following notes on the trade and industrial development of the Province of Yunnan during 1910 are based largely on the reports published by the Imperial Maritime Customs.

Although late in publication, they constitute an appropriate continuation of the review of the foreign trade of Yunnan in Daily Consular and Trade Reports for April 3, 1911, and show that, with the exception of Szemao, a port dealing with Tonkin and Burma and of no significance to American importers or exporters, there was a gratifying improvement in the foreign trade of the open ports of the Province and that a spirit of educational and industrial betterment characterized the year.

The completion of the French Yunnan Railway to Yunranfu and the opening of that mart to foreign residence and trade were significant features of the period under review.

The Trade of Mengtsz.

The total value of the trade of Mengtsz coming under the cognizance of the Imperial Maritime Customs in 1910 was \$7,566,853, of which \$3,351,031 represented foreign imports and \$4,215,822 exports of local origin. The total value of the trade of the port in 1909 was \$6,894,246, and in 1908 \$6,561,824.

There was an apparent large falling off in the value of foreign imports in 1910 as compared with 1909, but in reality an increase of approximately \$990,000. The immense difference between the values of the railway supplies imported in 1910 and in 1909—the Yunnan Railway was completed April 1, 1910—accounts for the discrepancy.

Cotton yarn is the staple import at Mengtsz and in 1910 reached the record figure of 11,305,466 pounds, valued at \$1,914,000, of which India supplied 75 per cent and Tonkin the remainder. Among the other principal imports may be mentioned cotton and woolen piece goods, kerosene, matches, aniline dyes, lamps and lamp ware, medicines, needles, and paper.

Tin the Chief Export—A Market for Sundries.

The value of native exports increased in 1910 over 1909 by 50 per cent, due almost entirely to the increased output of the Kochiu tin mines. The total production amounted to 13,662,000 pounds, or 4,218,800 pounds in excess of that of the previous year, and was valued at \$3,954,720. Tin prices ruled high on the Hongkong market during the year and encouraged the mine owners to work their shafts. The excellent record achieved in 1910 may induce the owners to increase the size of the foreign plant imported from Germany some years ago. The only other minerals exported in 1910 were zinc, 28,000 pounds; antimony, 122,666 pounds; and orpiment, 12,400 pounds—a poor showing for one of the richest mineral beds of the Empire. Among the other principal exports are beans, cow and buffalo hides and horns, false gambier, hams, marble slabs, native medicines, and white and yellow wax, all of which showed improvement in 1910.

There is little in the list of exports from Mengtsz, with the exception of tin (which finds its way very largely to Hongkong), to interest American importers, but the city itself and the district which it serves offer a considerable market for many foreign sundries, such as cigarettes, cotton umbrellas, talking machines, cloth caps, etc., in addition to the articles mentioned above as principal imports. It should be remembered, however, that it is almost purely a native market—the foreign population probably not exceeding two score—and that only articles suited to native tastes and ideas can hope to succeed in it.

A German firm with offices in Hanoi, Haifong, Saigon, and Paris does a general import and export commission business at Mengtsz.

A Satisfactory Year for Tengyueh.

The trade of Tengyueh, situated in the extreme western part of the Province, proved eminently satisfactory during the year and showed an improvement of 28 per cent over 1909. There was an importation of foreign goods to the value of \$954,628 and an exportation of native produce of local origin valued at \$367,541. No special features are recorded. The trade of the port is entirely with Burma and the medium of exchange is the rupee; hence it was not unnatural that the upward movement of silver exchange in 1910 should effect a general improvement in business.

There were gratifying increases in the imports of gray shirtings, cotton italians, velvets and velveteens, and Indian cotton yarn, and only insignificant decreases in white shirtings and T cloths. Among woollens, long ells dropped 50 per cent, but Spanish stripes rose from 15,980 yards in 1909 to 26,600 yards in 1910. The action of the Burma Government in excepting petroleum and tobacco in all its forms from the privilege of claiming a refund of seven-eighths of the import duty when they are reexported through Bhamo to Tengyueh caused a falling off in the importation of cigarettes from \$9,954 in 1909 to \$1,280 in 1910. American kerosene increased, however, despite this obstacle, from 19,380 gallons to 24,860 gallons. Of the other principal articles imported, aniline dyes increased from \$2,785 in 1909 to \$4,574 in 1910, and umbrellas from 9,870 to 15,130 pieces; prepared tobacco remained stationary at 266 pounds; and Japanese matches dropped from 35,050 gross to 27,130 gross.

There was also a gratifying increase in the amount of native goods sent abroad in 1910 as compared with the previous year. Almost without exception, however, the articles of export from Tengyueh are not of interest to the United States. The exceptions are orpiment, musk, and yellow Szechwan silk. The orpiment lodes in Talifu are said to be rich, but as yet have been worked only by crude native methods. The exportation of this pigment has increased steadily, however, from 426,666 pounds in 1903 to 1,199,566 pounds in 1910. It was also exported through Mengtsz, as noted above, to the amount of 12,400 pounds.

Musk and Silk—Railways—Education.

There was an exportation of musk in 1910 amounting to 276 ounces, the highest figure on record. The trade in musk has not been developed by the Chinese to anything like the point to which it might easily be brought. The shipments abroad from Tengyueh are collected by the representative of a French perfumery manufacturer, who spends part of each year in the Likiangfu district. There was also an exportation of musk from Yatung, Tibet, across the Sikkim frontier, amounting to 1,824 ounces. The exportation of Szechwan silk reached 121,733 pounds in 1910, a record figure; and now that it enjoys the outward transit-pass privilege, shipments will doubtless continue to increase. It is practically all taken in India.

The prediction that the completion of the Yunnan Railway to Yunnanfu would deprive Tengyueh of a large part of its distributing trade, by rendering simpler the importation and exportation of goods to and from eastern and northern Yunnan via Tonkin, was not borne out by the figures for 1910. The railway was opened in its entirety on April 1, and, while it has unquestionably assisted Mengtsz, it has had no apparent influence upon Tengyueh. There is the probability, however, that this is the result of the tardiness with which the conservative natives change from established trade routes, and that in time the value of rail communication will have become so well recognized that the line will take its proper place in relation to the commerce it was designed to serve.

The project to give Tengyueh rail connection with Bhamo has apparently been definitely dropped. It has not been discussed during the year and it is probable that unless the working of the French Yunnan line shows a profit, the Bhamo-Tengyueh scheme will not be resuscitated. A number of schools, in which both sexes are taught and in which the curriculum includes history, geography, arithmetic, drawing, and physical drill, have been started in the Tengyueh district. The teaching is conducted on the so-called Western system, but suffers much from the lack of competent teachers. At Yungchangfu experiments are being made with various kinds of American, Indian, and Egyptian cotton seed, with a view to introducing cotton growing as a substitute, in part, for the lost industry of poppy culture; and at the same place an institution has been opened to teach straw-braid weaving, an industry well suited to the district.

Szema Steadily Losing Ground.

With the exception of the year 1908, there has been a steady fall in the trade of Szema since 1903, due to some extent, in the case of imports, to the reluctance of the merchants of the district to use the rough and expensive route through the Shan States when they can

draw their supplies more conveniently through Tengyueh on the west and Mengtsz on the east. The total value of the trade coming under the Imperial Maritime Customs in 1910 was \$131,849, of which \$105,978 represented foreign imports and \$25,871 exports of local origin. The principal imports are raw cotton from Burma, of which 888,133 pounds came in during 1910; Burmese cotton cloth, of which 3,561 pieces were imported; and foreign umbrellas, of which 1,258 were purchased. With the exception of Burmese cloth, there were only 117 pieces of foreign cotton goods imported during the year. The receipts of woolen goods amounted to 40 pounds of blankets and 25 yards of Spanish stripes. The other imports are birds' nests, tiger bones, inferior cardamoms, elephants' teeth, deer horns, liquid indigo, rattan ware, and skins and furs.

The list of principal exports is scarcely more extensive, including as it does small quantities of brass ware, felt and silk caps, felt carpets, coarse chinaware, native cloth, copperware, straw hats and hat covers, iron pans and ironware, pottery, native boots and shoes, skins, steel, brown sugar, tea, tobacco, preserved and salted turnips, vermicelli, walnuts, and yellow wax. Raw yellow silk and silk piece goods have disappeared from the list. There was an increase in felt carpets from 1,780 pieces in 1909 to 2,329 pieces in 1910 and in black Puerh tea from 43,200 pounds to 87,333 pounds. Insignificant increases occurred in native cloth, hat covers, manufactured iron, iron pans, ironware, pottery, boots and shoes, steel, and turnips.

A New Open Port.

The latest "port," or, better, inland mart, to be opened by the Chinese Government to foreign residence and trade is Yunnanfu, the capital of Yunnan. It is not a "treaty port," but was voluntarily opened by the Government following the completion of the French Yunnan Railway, which connects Yunnanfu, via the important mining district of Mengtsz, with the Tonkin border at Hokow-Laokai. The city stands in the center of an elevated plain over 6,000 feet above the sea and of unusual fertility and salubriousness for southern China, and has a population of 85,000. It already possesses a mint, an arsenal, an electric-light plant operated by hydraulic power, a flour mill, a tannery handling 1,000 hides a month and turning out shoes, saddlery, accoutrements, etc., for the new army, a provincial assembly hall built in foreign style, new law courts, new prison buildings, etc., and has other innovations under way. Several foreign firms have located in the city and many of the native merchants have erected new and more pretentious shops—all looking for the business which is confidently expected to follow at an early date.

No figures have been published to show what has been done so far, nor is it possible at the present time to predict exactly what effect the opening of the place to foreign residence will have upon it and its foreign trade. Before the advent of the railway Yunnanfu drew its foreign goods largely through Suifu, on the Yangtze River, and Mengtsz. Suifu is neither an open port nor an important mart, but Mengtsz has been both since 1889 and has created for itself a large distributing trade in eastern Yunnan. In doing so it has overlapped the zone naturally belonging to Yunnanfu, and to this extent it may be expected eventually to lose territory; but trade districts once established, particularly in China, are slow to change, and more

especially is this so where as in this instance they are served by pack animals and porters.

Until the Yunnan-Suifu extension of the Yunnan Railway is effected, and it has not gone beyond the survey stage as yet, it is probable that a constantly increasing radius about Yunnanfu itself and practically all the country between Yunnanfu and the Yangtze, as well as much of that lying between the provincial capital and Talifu, will draw its foreign goods from the new mart, for the reason that it is much easier, cheaper, and safer to land them at Haifong and send them by rail to Yunnanfu than to land them at Shanghai and send them up the Yangtze. In this condition is to be found the reason for opening the city to foreign trade.

Foreign Firms—Sericulture.

Among the foreign firms established at Yunnanfu, one whose New York address may be obtained from the Bureau of Manufactures, is perhaps the most responsible. It has confined itself in the past largely to Government and other large contracts and in this has done exceedingly well. The great mass of arms, ammunition, and machinery recently imported into Yunnan has been supplied by it.

In their attempt to find substitute industries to replace the recently abandoned culture of the poppy, once the principal industry of the Province, the Yunnanese are giving primary attention to the development and improvement of sericulture. A school of agriculture has been started, which is apparently doing excellent work in educating the farmers about Mengtsz in the habits and needs of silkworms, sericulture in general, and the preparation of the cocoon product for the market. It is also importing, with success, seed from Shoching and Hangchow, in Chekiang, which produce first-class white cocoons, yielding a grade of raw silk which, it is claimed, compares well with the best found on the Shanghai market. The old "long reel" has been replaced by the "short reel" used abroad and in the foreign filatures in China, and the raw silk now being turned out by the school of agriculture is spun directly on the short reel, instead of being spun on the long reel and subsequently rereeled.

This silk, which has already found its way in small quantities into the Mengtsz market, is theoretically an 8-cocoon thread, and in quality, color, and size is said to compare favorably with the Shanghai rereeled Tsatlees. The silk industry in Yunnan is still in the initial stage, but once the importation of Szechwan yellow seed is stopped, only the best white seed used, and the work now being done by the school of agriculture is extended through the Province, Yunnan should produce 400,000 to 500,000 pounds of first-quality silk a year.

[In addition to the report referred to in the text of the foregoing article, a review of the Hongkong-Yunnan trade published on Aug. 9, 1911, is relevant.]

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.

INDUSTRIAL-MACHINERY BUSINESS IN CHINA.

[From Vice Consul General W. Roderick Dorsey, Shanghai.]

China, according to the returns of the Imperial Maritime Customs, purchases each year from foreign countries no less than 256 varieties of cargo. The United States participates to a greater or less extent in but 123 of these, and ranks third or higher only 27 times. If American exporters can not find among the remaining 133 articles any that would interest them, they should at least seek to increase their participation in the ones already tried and found suitable.

The majority of these, I realize, are lines too small to make direct individual effort attractive, but the cooperative and reciprocal methods of competing nations seem to afford a channel for successful effort in this direction. Some of these lines may prove impracticable and unprofitable for the American producer, but it is the opinion of many that such articles as phonographs, photographic and optical materials, lamps and lamp ware, bicycles, clocks and watches, hats, caps, gloves, hosiery, haberdashery and underwear, machinery, railway and electrical appliances, hardware and building material, medicines and perfumery, condensed milk, wine, beer, and spirits enjoy an increasing demand and will continue to do so for many years.

Cooperation for Small Lines.

I do not for an instant hold out the prospect of an easy market in these lines or invite dealers to plunge into them without first reasonably assuring themselves that the experiment is worth making. There is much they can do at the home end to get a knowledge and an intelligent grasp of chances here. The cost at which producers of other nations lay down the same goods in China is of first importance in determining if articles are competitive.

Where a line is not important enough to warrant establishing one's own offices, then the cooperative scheme should be attempted; but if this is not feasible, negotiations should be entered into with some locally established concern, preferably American or of a noncompeting nationality, for representation on an agency basis. If the latter arrangement is effected, the principal should be guided by his agents in all things local, leaving such matters as advertising and catalogue distribution in their hands and cooperating in every way to meet the competition and methods of other countries. Several firms in more important lines have found it profitable, in addition to entering into agency arrangements, to send their own technical experts to assist in introducing and handling their products, which is a distinct advantage where the line will stand it.

Machinery, railway and electrical appliances, and bridge-building materials should be kept constantly in mind as the trade is sure of expansion, and it must not be forgotten that to succeed in these there must be such representation on the spot as will enable dealers to give intelligent information, specifications, and quotations without delay. The tendency to-day, owing to the increasing competition between American and European manufacturers, is toward industrial and financial combines which, through their agents or branches in Shanghai, Peking, and other centers, stand ready to finance Chinese industrial undertakings and furnish all the machinery and technical supervision required.

Opinions of Shanghai Firms.

China is at the dawn of an era of industrial development, and the demand for implements for this expansion should continue to increase for many years to come. Following are ideas and views gleaned from local representatives of machinery and electrical appliances from time to time: The British and German firms are obtaining more business than their competitors because they study the requirements of the market more carefully than manufacturers of other countries and have far superior organizations in China. They also grant special terms of payment which Americans are not often willing to give. This is particularly true of the Germans, in whose country the banks amalgamate with manufacturers' syndicates, with the result that any scheme presenting a reasonable prospect of success is financed through this combination and German capital purchases the German materials with which the plant is fitted. There is usually a first partial payment and a lien taken on the plant so erected as security for the balance. In equipment of a municipal or public nature, the guaranties of local officials are often added to the security.

The American technical representative of a well-known company writes with reference to electrical machinery that at present there is excessive competition indulged in by foreign firms and any American exporter desirous of obtaining a foothold in the market must be content with small returns as long as present conditions last. Great emphasis in many instances is placed on price, which puts not only electrical but other American machinery at a disadvantage, except in the case of apparatus of the largest manufacturers. This is true for the reason that technical knowledge is lacking in China on the part of all but an extremely limited number of purchasers. Consequently few customers are in a position to judge the relative merits of machines offered and price becomes to a large extent the standard by which suitability is determined. This is directly responsible for the keen, low-priced, small-profit condition of the present day. Education will do much in time to alter this. Foreign competitors seek in this low-priced campaign to secure a footing against the time when development is more general, demand more generous, and education such as to render small margins unnecessary.

Local Representation an Essential.

One thing is certain: The industrial-machinery business in China can not be carried on without local representation of some sort. Catalogues alone are useless. Some of the important American houses are already in the field with technical experts operating independently or in conjunction with locally established firms, and these, I am told, have made headway.

Personally I have faith in American organization, alertness, and general ability to get business if gone after properly. For this reason I believe firmly in the cooperative scheme for houses having lines not sufficiently important as yet to warrant individual direct effort, but certainly entitled to the fair trial that only such representation can give. This is peculiarly applicable to houses producing industrial and other machinery, and such an organization supported by bank affiliations should be in position to secure a larger proportion of this expanding trade than the United States is getting at present. It is the plan of the competitors and is at least worth the most thorough investigation if not a trial.

INCREASED AMERICAN PURCHASES FROM RUSSIA.

[By Consul General John H. Snodgrass, Moscow.]

There was a large increase in the shipments of merchandise from Russia to the United States last year compared with the previous one. According to invoices certified at the several American consulates and agencies throughout European and Asiatic Russia, the value of the exports to the United States in 1911 was \$18,818,442, against \$14,939,092 for the previous year.

This increase was due largely to the greater shipments of hides and skins, which item represents over half the exports, and which increased from \$7,726,935 in 1910 to \$10,703,419 in 1911. Wool, another important item in the shipments to the United States, increased from \$2,193,404 to \$2,927,066, and licorice root from \$486,302 to \$557,294. There was a decrease in the exports of some of the articles which figure largely in the trade, such as rubber waste, flax and hemp, animal hair, and wood pulp.

Exports by Articles.

The following table gives the principal exports to the United States during 1911:

Articles.	Value.	Articles.	Value.	Articles.	Value.
Alcoholic products:		Furs—Continued.		Potash, carbonate of...	\$43,754
Kummel.....	\$10,509	Raw—Continued.		Raisins.....	30,708
Vodka.....	17,428	Hare.....	\$105,345	Rubber and manufac-	
Asbestos.....	8,960	Lamb.....	181,711	tures:	
Books.....	45,748	Lynx.....	9,219	Sponges.....	8,183
Bristles.....	22,859	Marmot.....	119,900	Tires.....	35,589
Casings.....	14,198	Squirrel.....	6,200	Waste.....	436,822
Caviar.....	141,626	Glue stock.....	61,753	Rugs.....	125,070
Church goods.....	8,943	Glycerin.....	187,965	Seeds:	
Cork shavings.....	7,797	Hair:		Beet.....	76,750
Fish:		Animal.....	284,103	Clover.....	20,549
Dried and salted...	12,086	Human.....	4,318	Lucerne.....	10,709
Herring.....	7,471	Hides and skins:		Millet.....	16,287
Flax and hemp and pro-		Calf.....	6,686,060	Vetches.....	10,467
ducts:		Colt.....	848,775	Tea.....	78,322
Codilla.....	10,721	Cow.....	172,908	Tobacco, unmanufac-	
Crash.....	52,990	Goat.....	897,172	tured.....	22,065
Flax.....	36,789	Horse.....	1,045,625	Toilet articles.....	7,127
Flax and tow.....	371,135	Horse fronts.....	36,094	Turpentine.....	18,013
Hemp.....	75,553	Sheep.....	1,012,134	Wood:	
Hemp and tow.....	30,240	Horses' tails, etc.....	25,548	Pulp.....	311,407
Oakum.....	11,654	Household goods.....	10,380	Walnut logs.....	87,000
Rope, bolt.....	24,282	Leather.....	10,148	Wool:	
Tow.....	8,344	Licorice root.....	557,294	Camel hair.....	560,973
Furs:		Lycopodium.....	32,903	All other.....	2,386,093
Dressed—		Manganese iron.....	197,737		
Lamb.....	15,057	Mushrooms.....	63,331		
Squirrel.....	12,275	Oil:			
Raw—		Fusel.....	561,060		
Ermine.....	14,964	Mineral.....	30,271		
Fox.....	59,774	Peas.....	126,741		

Shipments by Consular Districts.

The consulate at Riga and the agency at Libau lead in the certified shipments to the United States, over 60 per cent of the total exports from Russia last year being invoiced through that district. Of these shipments, amounting to \$11,580,360, only \$5,455,962 worth, however, originated in the Riga consular district, the greater part of the remainder, or \$4,949,372 worth, originating in the Moscow district, and consisting principally of hides and skins, wool, animal hair, hemp and tow, furs, seeds, and rubber waste. There were also \$646,798 and \$389,621 worth of merchandise, consisting principally of hides,

which originated in the St. Petersburg and Warsaw districts, respectively, invoiced through the Riga district; also \$139,812 worth, made up chiefly of mushrooms, hides, furs, and animal hair, the products of Odessa, which were invoiced through Riga.

Of the total shipments invoiced through the St. Petersburg consulate to the United States last year, goods amounting to \$172,718 were the products of outside districts, principally from Moscow, and consisting of hides and skins. Of the wool valued at \$868,027 certified for shipment from Batum, \$462,858 worth originated in the Moscow district.

The following totals represent the certified shipments through the several American consulates and agencies to the United States during 1910 and 1911:

Districts.	1910	1911	Districts.	1910	1911
Batum	\$1,507,652	\$1,925,762	Vladivostok	\$31,887	\$84,086
Moscow	2,511,889	2,190,680	Warsaw	802,946	414,602
Odessa	590,456	664,845			
Rostoff-on-Don	235,265	610,964	Total	14,939,092	18,818,442
Riga	6,374,464	9,766,596			
Libau	1,480,031	1,813,764			
St. Petersburg	702,673	1,080,750			
Helsingfors	266,518	204,911			
Reval	35,311	51,493			

FACTORS IN FOREIGN TRADE.

The Bureau of Manufactures has issued a bulletin that will no doubt find a permanent place on the desk of every manufacturer interested in foreign trade. In its 56 pages will be found answers to questions asked by every manufacturer sending out trade literature or opening correspondence with foreign firms: What language is it best to use? In what currency and what weights and measures should prices be quoted? What postage should be placed on the catalogue or the letter? Can I prepay a reply from the prospective customer? Is there a parcel post?

The bulletin answers these and other questions for each country in a concise manner. The reader can put his fingers on the information sought without hunting through a mass of detail that he does not want. Supplementing these statements are tables for converting the money of foreign countries into that of the United States; also a comparison of prices for countries in which both the monetary unit and the units of weight and measure differ from those used in the United States. For example, the latter tables show the reader at a glance what is the comparative price per meter in Mexican currency of a cloth quoted at 50 cents United States currency per yard or the price per pound in United States money of an article quoted at 30 francs per kilo. Currency-conversion tables and price comparisons are given for over 30 countries. Foreign postage rates and the parcel-post regulations are summarized and a list is given of the countries in which international reply coupons are valid.

Copies of the bulletin, which is entitled "Factors in Foreign Trade," are now available for distribution, and those desiring it should make application to the Bureau of Manufactures, Department of Commerce and Labor.

JAPANESE INTERESTS IN MANCHURIA.

[Compiled by Consul Albert W. Pontius, Dalny, from Manchurian Daily News.]

Agricultural Resources.

South Manchuria offers little encouragement for Japanese emigration. The soil of Kwantung Leased Territory is sterile, and the Territory has room for only a small number of farmers, even if all the available area were converted into rice fields. Then, the South Manchuria Railway area is merely a narrow strip of land, ill suited to agricultural settlements. The three coal mines, including Fushun Colliery, one of the richest coal seams in the world, afford no opening for Japanese labor, as Chinese labor is obtainable at very low rates.

The South Manchuria Railway Co. is conducting laboratory experiments, looking to the better utilization of beans. The larger the percentage of fat extracted, the greater is the fertilizing value of the residue bean cake. The common methods of bean milling in south Manchuria are wasteful. It may take some time for the oriental farmers to get reconciled to a powdery residue, but its higher value as a fertilizer will soon be realized and more economy accomplished, at the same time securing more oil.

Iron Drums as Receptacles for Bean Oil.

Iron drums as receptacles for bean oil for over-sea export (referred to in Daily Consular and Trade Reports for July 5, 1911) are found to be too unwieldy and also encounter a customs duty in Japan, in case of not being reexported within a fortnight of their importation. They are dutiable at 1.95 yen (yen=\$0.498) per 100 kin (kin=1.323 pounds). A Yokohama firm dealing in fish oils used old drums experimentally, but although satisfied of their being proof against leakage, could not use them, owing to the sudden advance of steamer freight, from England to Japan, from \$1.20 per 40 cubic feet last year to \$2.40 this year, and to the other disadvantages named. This Yokohama firm, which exports large quantities of fish and other oils, is trying to solve the problem of receptacles by planning a cask which meets all requirements. With kerosene-oil cans, which are most commonly used for bean oil, there is a leakage of 3 or 4 per cent.

The iron drum suggested as a substitute by Japanese Commercial Commissioner Tawara, at London, is U-shaped and manufactured by the Steel Barrel Co., London, being quoted in the catalogue at about \$11 each. It is 4½ inches high, 36½ inches in diameter, and weighs 230 pounds; 4 drums hold 3 tons. The iron plate of which it is made is about ½ inch thick.

Dairen Harbor Works.

The east quay of Dairen wharves, 1,450 feet long, and the east breakwater projecting therefrom have been completed, and the quay has 30 feet of water. A signal station is being constructed close to the lighthouse. The reconstruction of the main (west) quay into a vertical facing in concrete will be accomplished by the spring of 1913. Then the east side of west quay will be reconstructed.

The berthing capacity of the quay line is 5 steamers of 10,000 tons each, 4 more of 6,000 to 8,000 tons each, 3 of 4,000 tons each, and 10 others of 100 tons up to 3,000 tons each, making the total of 22 vessels at a time. So far the cargo-working record for a single day consisted in loading 9,584 tons general cargo and 2,400 tons of coal and discharging 3,293 tons of general cargo.

With the extension of the quay line, including new berths for steamers of larger type and the improvement of cargo-working equipments, the daily average of 10,000 tons for cargo work lies within easy reach, if only the goods to be loaded into steamers are conveniently placed and the maneuvering of vessels is conducted properly.

Railway, Horticultural, and Agricultural Program.

The following horticultural and agricultural work is planned for 1912, along the South Manchuria Railway area:

Saplings will be distributed to the principal stations, chiefly for hedge plants, shade trees, and improvement of appearance. Should the company's nursery at Hsiungyocheng lack a sufficient supply, the shortage will be supplied from other sources.

Growing the mulberry tree is to be taken up in earnest. Both the climate and soil of south Manchuria encourage sericulture. Should the initial undertaking at Dalny prosper, tree plantings will be extended northward.

Young fruit trees will be distributed to railway employees along the lines for planting about their residences, to encourage a taste for horticulture and to experiment in orcharding.

Experiments in rice farming have been made at Mukden, Hsiungyocheng, Chien-chinchai, and other places with fair results at each place. Haichong, Liaoyang,

Tiehling, and the country along the Mukden-Antung line are also pronounced to be well suited to rice farming. Several new places will be tapped this year and the railway company is prepared to offer sundry facilities in the lease of lands, irrigation, etc., where necessary. For instance, wells may be bored at the company's expense if it considers such help fully justified.

A notification has been issued to the effect that all applications for information on any of the foregoing subjects should be sent to the company's district agents at the various centers.

Manchurian and Japanese Coal-Mining Comparisons.

Fushun Colliery, of Manchuria (partially described in Daily Consular and Trade Reports for Feb. 26, 1912), is a peer to the Mûke Colliery (annual output 1,500,000 tons), the most extensive coal mines in Japan. The Japanese mines of the Kyushu district pay an average daily wage of 60 cents, while Fushun Colliery can obtain any amount of Chinese labor at 22 cents. Moreover, the mining capacity of the Kyushu collieries, which is put at 8,000,000 tons per annum, has attained its zenith, and hardly admits further expansion. It is possible that the present output will be maintained for 50 years or so, but not much longer. Apart from the Kyushu collieries, Japan can count for coal supply upon Hokkaido, with 1,400,000 tons, and Iwaki Province, with 800,000 to 900,000 tons, which, combined with the other sources, make a total of 7,000,000 tons per annum. Of this grand total of 15,000,000 tons, Japan can spare only 3,000,000 tons for export.

HAWAIIAN INDUSTRIAL NOTES.

[From the Honolulu Bulletin.]

Pineapple Trade Expansion—Maui Improvements.

A Chicago firm, which employs 400 persons in its Hawaiian pineapple cannery during the season, has been turning out 110,000 cases, but proposes to put up 330,000 cases in 1912. The manager of the concern says the pineapple pack of Hawaii will be 1,500,000 cases by 1914.

The island of Maui is on improvement bent, and it is learned that it is intended to spend nearly \$1,000,000 in general island betterments. Among some of the work in hand and in view may be mentioned the extension of the Kahului Railroad and the construction of irrigation ditches. There are thousands of acres of pineapple lands to be opened up also. Business conditions on Maui are reported to be very favorable.

Beef Hotel a Possibility.

A number of business men in the city are taking up the project of building a hotel on the coral reef near Diamond Head, and at the same time filling in about 2 acres with rock with a connecting pier to the shore. It is further planned to build a submarine tower down to the bottom just outside the reef. At the lower end of the tower it is intended to have big glass plates so that those who go down will be able to see all that is going on at the bottom of the sea and the fish swimming about. The promoters figure that it will be the greatest attraction the city has ever had.

More Building—Paving Blocks.

There is much activity promised in the building line on this island in the near future. Work on the new Charles Brewer Estate Building has been commenced. The erection of a 4-story structure will be commenced soon by the Chas. M. Cooke (Ltd.). There are a number of other structures underway throughout the city.

One of the largest shipments of hardwood paving blocks received at Honolulu in months arrived on March 22, there being 63,000 blocks.

Increase in Lumber Rates.

Coast advices tell of a material increase in lumber rates along the Pacific coast. Freight rates for carrying lumber on the coast have been increasing gradually during the last year. Steam schooner tonnage for handling the product is being held at \$4.75 for transporting 1,000 feet, as against \$4 a thousand in February, 1911. There is the same proportionate increase for transporting lumber to San Pedro and other points below San Francisco, the present rate for that haul being \$5.25 per 1,000 feet. Local steam-schooner agents attribute the increase largely to the fact that practically all the schooners which formerly remained in the coastwise trade have been going offshore the last few months, greatly cutting down the supply of available tonnage.

Steam schooners are being turned out in nearly all of the big shipyards of the coast, and before a great while it is predicted there will be enough of the vessels to take care of the coastwise trade without any attempt being made to increase the rates.

TOURISTS AS AGENTS FOR AMERICAN PRODUCTS.

[From Consul G. C. Cole, Dawson, Yukon Territory, Canada.]

American tourists and others traveling in foreign countries could accomplish a great deal toward creating a market for American products if they would use a little tact and national pride by visiting stores and shops and calling for some American-made article.

No merchant will carry a class of goods for which he has no demand; neither will there be a demand for a product of which the public knows nothing. If the tourist and others would call for American products when purchasing articles abroad and not accept the substitute offered them until they have visited a number of stores, the merchants would soon begin to inquire as to where and how they could procure these goods to carry them in stock. The public would also learn that this new product was in demand and on the market and would begin to make purchases.

This mode of introducing American wares affords the tourist an opportunity to visit the shops, which are a source of pleasure to most people—in fact, form one of the chief pleasures of the sight-seer.

I make it a rule to visit as many stores as possible when in foreign countries (invariably calling for some American product, but seldom finding it), for two reasons; one is to see the class of goods carried, the price charged, the mode of display made, and the manner of selling them; the other is to see if any American goods are handled, and if so, what class and to what extent, and the price obtained.

How a Woman Established a Trade in Shoes.

When stationed at Buenos Aires, Argentina, I was called upon by a lady, who had been living there but a short time, for the address of a certain shoe factory in the United States which made the kind of shoe she had been wearing. The address was furnished and a pair of shoes ordered through a merchant of that city. In due course of time the lady received the shoes and exhibited them to some of her friends, who in turn, being well pleased with the neatness and other qualities, gave orders for this shoe in the same way. Through the efforts of these ladies so many others made demands that the merchant was obliged to order by the case.

This trade was established by one lady in a special effort to procure the shoe of her choice, yet wholly unconscious of what she was accomplishing for American trade in that country.

I give the illustration to show how simple it is sometimes to create a demand and establish a trade for an article of merit. If tourists and others were advised in some way of what they could do for American commerce by a slight effort along the lines here suggested, I am confident they would avail themselves of the opportunity.

German Agency Contract.

Consul Herman L. Spahr, of Breslau, Germany, forwards a form of agency contract, in German, drawn up by a German lawyer for use in that country, with the warning that American manufacturers in signing a contract for an agency with a foreign house should be careful not to make themselves liable to pay commissions on all sales which might be effected in any way in that territory for many years to come. [The blank will be loaned upon application to the Bureau of Manufactures.]

BOOKBINDING FOR THE TROPICS.

[From Consul General George E. Anderson, Hongkong.]

American publishers and bookbinders generally, issuing publications which may be used in the Tropics, need to give attention to the matter of employing in their work such materials as will not only resist the usual effects of a hot, damp climate, but which also will withstand the onslaughts of various insects and worms.

This is of particular importance to publishers of trade catalogues. Hundreds of catalogues of American business houses, prepared at great expense and bound in permanent board or cloth, attractive in design, and calculated to merit a place in a trade library, are ruined by two or three days' exposure in an office. Many of them in whose binding ordinary glue is employed come apart as a result of the dampness of the climate. More of them are damaged by the ravages of insects, largely by cockroaches eating the sizing or glue stock in the filler of the cloth or board binding. There are also other pests to be guarded against in this line.

Philippine Government Experiments.

For some time the bureau of printing of the government of the Philippines has been carrying on, with satisfactory results, experiments in the use of special glue stock and sizing and of various materials for book coverings. In each book issued is inserted a printed slip which asks the recipient to report to the bureau the experience had with that particular sort of binding. Results are watched and a record kept of the advantages of each particular variety of binding materials. At present the publications of the bureau are being issued in bindings made from approved materials, and the result is that these are practically the only publications received in this part of the world that are not immediately injured by local pests.

Experience in other tropical countries is practically the same as that in South China, and the efforts of the government bureau at Manila ought to be of more than passing value to publishers generally. American exporters will increase the probable value of their trade catalogues to be used in tropical countries if they will give the matter of resisting dampness and insect pests special attention.

VISIT OF CHINESE BUSINESS MEN.

The Associated Chambers of Commerce of the Pacific Coast (central office, San Francisco, Cal.) has extended to the Consolidated Chambers of Commerce of China an invitation to send a delegation to tour the United States. This will carry out a plan made a year ago, but which was delayed owing to the disturbed conditions in China. The present invitation was conveyed in person by Robert Dollar, who has just returned from China. Mr. Dollar says that before leaving San Francisco arrangements had been made for a special train of sleeping and dining cars to carry the party about 12,000 miles by rail and to visit 63 mainland cities. It is estimated that 90 days will be required to complete the tour.

The main object, as outlined by Mr. Dollar, was that the excursion would serve to stimulate trade relations as well as increase friendly feeling between the two countries.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8573. Representation in Spain and Portugal.**—The Bureau of Manufactures is in receipt of a communication from a correspondent stating that he is about to make a commercial tour of Spain and Portugal. He states that he will undertake to represent and establish connections for American manufacturers; that he has already represented American firms in various foreign countries and has secured orders for such articles as office appliances and furniture, school desks, books, typewriters, labor-saving devices, engineering supplies, etc.
- No. 8574. Fire department apparatus.**—Consul General David F. Wilber, of Vancouver, British Columbia, Canada, has forwarded copy of a notice calling for tenders for fire department apparatus that has been authorized for that city. Bids will be received by the City Clerk, Vancouver, until May 2 for one auto gasoline pumping engine, two auto hose wagons, and one combination chemical engine and hose wagon, auto; also miscellaneous equipment for each car. Specifications and further particulars regarding the above may be obtained by addressing the City Clerk.
- No. 8575. Waterworks and sewerage franchise.**—An American legation in a foreign country reports that the local Government will undoubtedly in a short time take measures to install systems for supplying water to two cities in the country. The Government intends that this enterprise shall be given to a private company under a franchise for 99 years. Bids for this franchise will be invited and the award will be made to the bidders offering the lowest metered rates to consumers. Coupled with this proposition is one for the construction of a modern sewer system for the two cities, an annual charge being permitted for all entries thereto, and the award being similarly based upon the prices fixed for such entry. These franchises are valuable ones, and the projects should command the attention of American capitalists and contractors. Copy of the complete report, giving further particulars, will be sent to interested firms by the Bureau of Manufactures.
- No. 8576. Briquet-making machinery.**—A resident of Germany informs an American consular officer that he desires the names of the manufacturers or inventors of a briquet-making machine according to the Armstrong-Mordan process. This correspondent states that the machine produces a briquet composed of coal dust, crude petroleum, and straw, said to be cheap and of high caloric power.
- No. 8577. Construction of buildings for normal schools.**—The American consulate general at San Salvador, Salvador, reports that the Ministry of Public Instruction of Salvador has advertised for bids for the construction of two buildings of reenforced cement and concrete, to be occupied by the normal schools. The buildings are expected to cost about \$60,000 each. Bids must be received by the ministry on or before July 4, 1912. Two copies of the specifications, in Spanish, accompanied the report and will be loaned by the Bureau of Manufactures. Plans will be forwarded by the consulate general as soon as they are issued, and these also will be loaned by the bureau when received.
- No. 8578. Leather.**—An American consul in a European country reports that there are excellent opportunities for the American exporter in his district. A firm engaged in the agency business for many years has expressed a desire to represent American manufacturers of leather, especially fine upper leather.
- No. 8579. Glassware of various kinds.**—A business man in a European country has advised an American consulate that he would like to secure an agency from some American firm exporting cut glass, pressed glass, glass vases, and compot dishes of colored glass.
- No. 8580. Furniture.**—A firm of manufacturers' agents in a Latin American country informs an American consular officer that it desires to obtain the local representation of the following lines of American goods: Roll-top desks, basket furniture, cheap chairs, better class office furniture, bookcases, cradles, combination chairs, and other lines of furniture.
- No. 8581. Exploitation of mines.**—Tenders are invited by the Prefecture, Algiers, Algeria, for the exploitation of copper, silver, and lead mines, of about 18 square kilometers. No further particulars are supplied.

- No. 8582. Telephones.**—The Deputy Postmaster General, Perth, Western Australia, will receive bids until May 8, 1912, for the supply and delivery of common battery telephones (schedule No. 190). Copies of the specifications and forms of tender on application to the High Commissioner for the Commonwealth of Australia, 72 Victoria Street, S. W., London, England. Local representation is necessary.
- No. 8583. Railway construction and rolling stock.**—The Minister of Ways and Communications in the Russian budget for 1912 has allocated \$58,254,504 for railway construction; \$26,900,704 for extension and improvements; and \$9,599,694 for rolling stock. The Japanese budget for the same year also authorizes the expenditure by the Railways Department of \$26,814,415 for new works and improvements. No further particulars are furnished in either case.
- No. 8584. Harbor extension.**—An important scheme of harbor extension is projected for Dundee, Scotland, at an estimated outlay of \$875,970. It is proposed to build a wall along the river front for 1,000 feet. An estimate drawn up is framed as follows: Cost of monolith wall and fendering, filling at back of wall (ferroconcrete), shed, roads, drains, cranes, lighting, and extension of the common sewer, \$754,823; cost of dredging a berth 200 feet wide to a depth of 28 feet below harbor datum and dredging the bank in front of berth to 20 feet below harbor datum, \$155,728. It is also suggested to have a new 120-ton crane on sheer legs, the estimate being \$72,997 for the crane and \$24,332 for the necessary foundations. A subsidiary contract may also have to be tendered for the removal of a large quantity of rock at the approach to the Camperdown Wharf. This work is estimated to cost \$48,665, and the removal of a bank in the line of approach to the western wharf is estimated to cost about \$19,466.
- No. 8585. Railway.**—The Public Works Department, La Paz, Bolivia, invites tenders for the construction of a railway from Potosi to Sucre, and from Quiaca to Tarija. Particulars as to date for receipt of tenders are not furnished.
- No. 8586. Tramway extension.**—The London County Council, Spring Gardens, S. W., London, England, contemplates the extension of its East India Dock Road (London) tramway section, and is prepared to receive tenders for the execution of the work. The value of the contract is placed at \$91,000.
- No. 8587. Dry-dock tenders.**—It is reported that the Canadian Federal Government will call for tenders for the erection, under the dry-dock act, of a huge graving dock in the port of Quebec, the dimensions to be 1,150 feet long, 110 feet wide, and at least 37 feet deep. The act provides that every company tendering shall submit with its tender a report of its engineers establishing the advantages and disadvantages of the two respective projected sites, one at Levis and the other at the mouth of the St. Charles River. Tenders must be sent in on or before May 20, 1912.
- No. 8588. Cranes.**—"L'Administration de la Marine," Dunkirk, France, is prepared to receive tenders for supplying cranes, the estimated value of the contract being placed at \$198,553. No further particulars are given.
- No. 8589. Telephone installations.**—In the Norwegian budget for 1913, provision is made for the expenditure of \$405,539 by the Post and Telegraph Department for telephone installations. Details are not supplied.
- No. 8590. Harbor works.**—The harbor board, Valencia, Spain, will expend about \$25,000 on harbor works. Particulars, form of tender, and conditions governing this contract may be obtained from "Junta de Obras del Puerto," Valencia, Spain.
- No. 8591. Bridge.**—Tenders are invited by the Public Works Department, Montevideo, Uruguay, for the construction of a bridge over the Arapey Grande. Tenders will be received through local agents only.

DIESEL-ENGINE COMBINE.

[From the London Financial Times.]

It is reported that an amalgamation is contemplated between the Diesel Engine Co.; Carels Bros., a Belgian undertaking that manufactures Diesel engines; and Davey Paxton & Co., of Colchester. The capital of the combined undertaking is placed at £750,000 (\$3,650,000), of which between £400,000 (\$1,947,000) and £500,000 (\$2,433,000) may be publicly issued, and the balance held in reserve. Considerable developments are reported in connection with the Diesel engine, and this amalgamation is probably for the purpose of assisting these. The system of giving other firms a license to manufacture Diesel engines, however, has proved successful and is not to be discontinued.

SALE OF CIGARETTES IN FRANCE.

[From Consul General Frank H. Mason, Paris.]

As the sale of tobacco and its products is a Government monopoly in France, permission must be obtained from the director general of State manufactures for the introduction of foreign cigarettes for public sale in that country. Two models of cigarettes and two packages of each model must be presented by each maker desiring admission. The applicant must agree to furnish to the regie (the Government monopoly) specified quantities of cigarettes annually, state the price and give a description of each model of cigarette, the style of packing, number of cigarettes in a package, etc., and submit samples. The retail selling price is calculated on the basis of the weight and wholesale price of the cigarettes by a formula established by the Government regulations. All cigarettes containing substances detrimental to the public health and all those whose packing does not conform to certain rules are refused admission.

After being admitted, each manufacturer is required to deposit a guarantee fund of 20,000 francs (\$3,860) in currency or Government bonds, which sum is returned at the end of three years or whenever the profits of the brand exceed triple the annual minimum exacted by the State, unless the brand is suppressed within that time, when the guaranty is retained by the State. Upon receiving an order from the regie, the manufacturer is required to ship the goods promptly, freight prepaid, to the Manufacture des Tabacs de Paris-Reuilly, where they are stored at the manufacturer's risk until verified and accepted by the regie. In case the sale of the various types of a certain brand fail to return an annual profit of 40,000 francs (\$7,720) to the regie during the first three years of sale, the brand is suppressed.

In October, 1911, the administration of the State manufactory was authorized to negotiate contracts for the trial introduction of self-lighting cigarettes, subject to indorsement by the public-health officers. Up to March 15, 1912, no foreign manufacturers of such cigarettes had availed themselves of the new regulation.

[Translations of the complete regulations of June 28, 1910, governing the admission into France of foreign cigarettes for public sale, and the decree of Oct. 6, 1911, regarding the sale of self-lighting cigarettes, may be obtained from the Bureau of Manufactures.]

THE BRITISH TRADE COMMISSION.

The British Imperial Trade Commission has now been completed. The representatives of the United Kingdom are Lord Inchcape, chairman; Sir Rider Haggard, Sir Edgar Vincent, Sir Charles Owens, late of the London Northwest Railway; T. Garnett, cotton manufacturer, of Manchester; and William Lorrimer, Glasgow.

The Dominions' representatives on the commission are: George Foster, Canada; Donald Campbell, Australia; Bowering, Newfoundland; Sir David Graaf, South Africa; Sir J. Ward, New Zealand, with W. A. Robinson, of the Colonial Office, as secretary of the commission.

A Government official announced in the British Parliament that he hoped the labors of the trade commissioners would be concluded before the next imperial conference was held.

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TARIFF SYSTEMS OF LATIN AMERICAN COUNTRIES.

The present report on Panama is one of a series of reports by Dr. Rutter, tariff expert of the Department of Commerce and Labor, who has been sent, as commercial agent of the Bureau of Manufactures, to make a study of the tariff systems and customs regulations of Panama and the South American countries.¹ The reports are not limited to the tariffs of the various countries, but deal also with such subjects as port regulations, patent and trade-mark laws, and other Government regulations and facts of interest to those having business transactions with these countries.

PANAMA.

[By Commercial Agent Frank R. Rutter.]

Customs Tariff.

With few exceptions, the import duty imposed by Panama is 15 per cent ad valorem, calculated upon the invoice value. This same rate was prescribed by the first customs tariff enacted after the establishment of the Republic, but remained in force only a few months. In December, 1904, it was reduced to 10 per cent ad valorem, in order to comply with an arrangement entered into with the United States War Department, whereby it was agreed, in return, that imports in the ordinary course of trade should not be entered at the terminal ports of the Canal Zone, but should instead be shipped in transit to the appropriate port of Panama and thus be subject to the regular schedule of duties established by the Republic. From this régime are excepted goods in transit across the Isthmus, coal and oil for seagoing vessels, and supplies for the Isthmian Canal Commission or the Panama Railroad, any of which may be entered at the Canal Zone ports without the intervention of the customs authorities of Panama.

In January, 1911, the assent of the United States was given to an increase in the ad valorem rate of duty from 10 to 15 per cent. By law of January 11, 1911, the President of Panama was authorized to

¹ Preliminary announcement of this tour was made in Daily Consular and Trade Reports, Jan. 26, 1912.

increase the rates up to the new limit. The Executive decree of January 23 carried the rate generally only up to 12½ per cent on and after May 1, 1911, although a few articles (silks, jewelry, furniture, silver and plated tableware, and perfumery) were subjected to the full duty of 15 per cent ad valorem, while flour, lard, rice, and corn remained dutiable at 10 per cent ad valorem. A subsequent decree, effective September 1, 1911, raised the rate on articles dutiable ad valorem to 15 per cent, except on wheat, flour, corn, rice, lard, and alfalfa,¹ the rate on these articles being 10 per cent ad valorem. The duty of 12½ per cent ad valorem on sirups, extracts, grape juice, mineral and aerated waters, elixirs, and medicinal wines was not affected by the decree.

Specific Rates—Articles Exempted from Duties.

Specific rates of duty are applied to imports of cattle and beef, coffee, salt, tobacco and manufactures of tobacco, opium, matches and materials for their manufacture, beverages, essences, and sweetening substances for use in distillation. By the arrangement entered into with the United States, the Government of Panama has agreed not to increase the rates of duty on any of these articles, with the exception of wines, liquors, alcohol, and opium. A number of articles are exempted from duty, the most important of which are breeding stock, ice, guano, living plants and cuttings, seeds, coal, newspapers and printed books introduced by mail, raw materials for candle and soap making, news paper, printing ink, and machinery and supplies for printing and binding, irrigation machinery, school supplies imported by municipal authorities, and supplies for members of the diplomatic corps, for the Isthmian Canal Commission, and for the Panama Railroad.

Absolute free trade prevails between Panama and the Canal Zone. No customs frontier is maintained. This situation is practicable because all articles intended for consumption within the Canal Zone, unless imported directly by the Isthmian Canal Commission or the Panama Railroad, must have satisfied, on their first importation, the customs requirements of the Republic. Imports into the United States from the Canal Zone, as well as from the Republic of Panama, are subject to the ordinary rates of duty prescribed by the United States tariff.

Dutiable Value.

Since the great majority of articles are subject to ad valorem rates of import duty, it is natural that efforts should be made to guarantee the correctness of the values shown in the accompanying invoices. It is required that invoices be made out on forms sold by the consulates of Panama,² that they be certified to by a Panaman consul, and that the insurance papers be submitted to the consul at the same time as the invoices. This last requirement is made by few, if any, other countries and frequently causes delay in the shipment of merchandise. If no insurance is to be taken out on a shipment, a declaration to that effect, under oath, is necessary. The Government also reserves the right to purchase at the invoice price any goods believed to be undervalued. (See ordinance No. 30, 1904, art. 10, and Law No. 8, 1907, art. 11.)

¹ On alfalfa the rate of duty from May 1 to Sept. 30, 1911, was 12½ per cent ad valorem.

² At the price of 15 cents per set.

How Imports are Entered.

The geographical situation of Panama, with its two chief cities completely surrounded by the Canal Zone, is unique. Imports landed at Cristobal or Balboa, if consigned to business houses and not intended for reexportation, must be delivered to the Panama Railroad, conveyed either to Colon or Panama, and held there until proof is given that the import duties have been paid. The railroad company assumes the obligation of transporting the goods under seal and its storehouses serve as a kind of bonded warehouse. No customs warehouses are maintained by the Republic, either at Panama or Colon. Storage is charged as follows, after goods have been 48 hours in the railroad warehouses: Barrels, half barrels, or packages (unless of extra size), 25 cents per week; hides, 10 cents each per week. Similarly, cars detained longer than 72 hours are subject to a charge of \$5 a day. In actual practice, however, prompt delivery is customary, the principal importers having adequate storage rooms of their own.

Special Exemptions from Duty.

Samples imported by commercial travelers are admitted on the deposit of sufficient funds to cover the duties stipulated in the tariff, and the deposit is returned on proof of the reexportation of the samples, without limitation as to the length of time that the samples remain in the country. No license fee is required from commercial travelers.

Articles imported by the Government are not subject to duty. Special remission of duties is sometimes granted on petition of the importers, setting forth the reasons justifying the free admission of their goods, when these are intended as materials for public works, or when, as in the case of machinery, they are to remain in the country only for a limited time.

Books and periodicals are exempted from duty when imported by mail. Printed matter intended for advertising purposes is now liable to a duty of 15 per cent, the rate prior to the arrangement with the United States having been 40 per cent *ad valorem*. This provision refers primarily, if not exclusively, to advertisements of Panama business houses printed abroad and imported in bulk. Catalogues and advertisements of foreign firms, especially when sent by mail in single copies, are, it is understood, not liable to duty, and it is doubtful whether duty would be levied even if the catalogues were sent in larger quantities for distribution, provided that they were intended to advertise articles of importation and not some local business house.

Tariff Classification—Port Facilities.

No special provision is made for giving advance information concerning the application of the tariff of Panama to individual articles. Owing to the simplicity of the schedule, comparatively few questions arise in respect to classification. It is stated, however, that the *Secretaría de Hacienda* will indicate in advance of importation the rate of duty applicable to any article not clearly described in the tariff; requests for such information should contain a full description of the article in question, accompanied whenever practicable by samples, and may with advantage be transmitted through the consul general of the United States at Panama.

The docks at Cristobal and Balboa and, with the exception of one pier at Colon are controlled by the Panama Railroad. The docks at Balboa, owing to the heavy tides of the Pacific, with a mean variation there of about 20 feet, have had to be equipped with cranes. The charges are based on the amount of cargo loaded or discharged, the rate being for most articles 80 cents per ton for dockage and 10 cents per ton for handling. At the Caribbean ports (Cristobal and Colon) the charges for steam vessels are fixed amounts, irrespective of the size of the vessel or the cargo shipped or landed. The work of handling the cargo at Cristobal or Panama must be performed by the shipowners and not, as at Balboa, by the Panama Railroad.

Packing of Goods.

The problem of packing for shipment to Panama is comparatively simple. The import duty on most articles is not affected by the packing used, whether heavy or light, and the shipment is made exclusively by steamers landing at well-equipped docks; sometimes, however, owing to the limited dock space on the Pacific side, merchandise is lightered to shore and then hauled a short distance by rail. No peculiar form of packing is therefore necessary; it is sufficient if the cases used are strong, and the goods are packed so as to withstand dampness. Notwithstanding the comparative simplicity of the problem in respect to articles for consumption in Panama, many complaints of defective packing are heard. It is believed, however, that there has been material improvement within the last few years, especially in the case of purchases made by the commissary department of the Panama Railroad, which handles the larger part of the imported articles used by the employees of the company and of the Isthmian Canal Commission. The improvement is perhaps attributable largely to the careful stipulations as to packing made in the invitations for bids and the insistence upon the strict observance of such requirements. In the case of shipments to private consignees similar packing should invariably be employed, unless the purchaser gives more precise instructions.

Goods Arriving from United States.

The packing of foodstuffs imported from the United States is said to be generally satisfactory, although formerly insufficient attention was given to the need of protection against mold, due to the humidity and heat, and, even yet, grain is frequently shipped in old bags, too frail to withstand the handling, and, in spite of extra care taken by the dock and railroad authorities, much grain is lost.

For dry goods and similar articles the packing used by American exporters is said to compare in general unfavorably with that used by their European competitors. In order to avoid theft en route, the name of the article should not appear on the package. The minimum thickness of board advised for cases is seven-eighths inch, and the cases should be strengthened with three iron bands or else wired and sealed. An example was cited of two pairs of shoes being taken from a case which was fastened with bands at the two ends, but not around the middle; the boards were forced near the middle and afterwards the case was closed again. Linoleum is said to withstand the handling better if rolled, covered with burlap, and marked "Use no hooks," than if inclosed in a crate. For a long journey it is frequently desirable to cover a case with burlap, so that its appearance

when delivered to the consignee will be attractive. Every effort should be made to preserve the advantage enjoyed by manufacturers of the United States because of lower freight rates and the natural preference on the part of the large American population in Panama and the Canal Zone for articles to which they are accustomed.

Absence of Additional Taxes—Trade-Marks and Patents.

No internal-revenue, provincial, or municipal taxes may, under the arrangement between the United States and Panama, be imposed on imported merchandise. On beer brewed in the Republic a tax of 2 cents per liter is imposed, and on distilled spirits a tax of 10 cents per liter; a tax of 10 cents per liter is, by Executive order of May 13, 1911, also applicable to spirits distilled in the Canal Zone.

The protection of the patent, trade-mark, and copyright laws of the United States was extended to the Canal Zone by Executive order of March 12, 1907, effective April 15, 1907. So far as concerns the Canal Zone, therefore, no formality is required in the case of trade-marks registered or patents and copyrights granted in the United States. The Republic of Panama, however, has distinct laws governing patents and trade-marks. Copies of the laws of November 14, 1908, and January 29, 1911, dealing with patents and trade-marks, are on file in the Bureau of Manufactures, both in the original and in translation. The essential feature is the requirement of registry, granted in the case of trade-marks for a period of 10 years, renewable indefinitely for corresponding periods, and in the case of patents for 5 to 20 years. Application must be made on stamped paper and be accompanied, respectively, by four copies and a cut of the words, phrase, symbol, or combination thereof desired for use as trade-mark, or two copies of the description and drawing and, when practicable, a model of the object to be patented. After two announcements in the *Gaceta Oficial*, 90 days must elapse before the registry is granted, which is regarded merely as *prima facie* evidence of the right of the applicant, no examination being made as to any conflict with prior rights. The fee for trade-marks¹ is \$25 and for renewal of trade-marks \$20, while for patents the fee is \$5 a year. Foreign trade-marks or patents must be previously registered in the country of manufacture, and in the case of patents the period is limited to that still to run in the country in which first patented, but may in no case exceed 15 years. Patents lapse if not worked within the first third of the period for which they are granted. When originally granted for less than the maximum period, the time may, at the discretion of the Government, be extended up to the limit fixed by law.

Labeling Requirements.

Penalties, equal to those for the infringement of registered trade-marks (fine of \$25 to \$250 or imprisonment for one to three months), are provided for the false labeling of goods, with intent to defraud, in respect to their nature, quality, quantity, number, weight, measure, or country of origin or manufacture. Aside from these restrictions, contained in the trade-mark law, the customs regulations require that all shipments of champagne shall be accompanied by a certificate of origin, issued by the local authorities and viséed by the consul for

¹ In the case of trade-marks for Panaman products, only half the ordinary fees are charged.

a fee of \$1; the importation of other sparkling wines labeled "champagne" or under that name is prohibited. Methylic alcohol must be denatured on entering the country so as to prevent its use in the manufacture of alcoholic liquors.

Stability of the Tariff.

The tariff arrangement between Panama and the United States guarantees a general low level of duties, and, more important still, safeguards importers against any material change in the rates of duty and against the imposition of additional taxes. With freight rates favoring shippers from the United States to the extent of 15 to 20 per cent, and with the preference for American goods on the part of a large portion of the residents in Panama and the Canal Zone, the future for American trade is bright. The importance of the market is far greater than the population of the Republic would indicate; even now the Isthmus is on the highway of travel from the west coast of South America to Europe, the West Indies, and the United States, and when the two oceans are united the commercial significance of Panama can not fail to be enhanced. Every effort to conserve and promote trade with Panama, by observing the requirements as to packing, by according the usual credit facilities, and by catering to the natural preferences of the buyers, will be amply repaid by trade with the whole Pacific coast of Central and South America.

LACK OF FORESTS IN CHINA.

[From Consul General Samuel S. Knabenshue, Tientsin.]

Forestry is a subject in which the Chinese evince no interest, as there are no forests in this country. The Great Plain, on which Tientsin is located, never had forests, being entirely of delta formation, and the mountainous regions to the north and west were denuded of their forests centuries ago. The surface soil of these mountains has been washed away, and to reforest them would be a matter of great difficulty. The only nurseryman in this consular district is Mr. F. Bade, of the Tientsin Nursery Gardens, who is much interested in tree culture. He raises various shade and ornamental trees from seed, but the soil of the Great Plain is alkaline and comparatively few varieties of trees will flourish in it. He has had the most success with the acacia [which is also being used by the Germans in the Tsingtau district].

A British corporation engaged in mining and shipping has a concession for coal mining in the Kaiping district, about 80 miles northwest of Tientsin. [The name of the manager may be obtained from the Bureau of Manufactures.] The surface of the region is broken by hills 50 to 200 feet high, which are absolutely bare of trees, and the company has begun the work of afforestation. It already has 1,000,000 young trees growing, chiefly acacia, and is preparing to establish a nursery for them on an extensive scale.

There are no Government forestry officials, schools of forestry or horticulture, magazines devoted to these subjects, or associations of foresters, nurserymen, seedsmen, etc., in China. [At Tsingtau, German China, afforestation has been successfully carried on by the German Government. See Daily Consular and Trade Reports for Jan. 4, 1910, and June 5, 1911.]

AMERICAN TRADE WITH GUATEMALA.

[By Consul General George A. Bucklin, Jr., Guatemala City.]

Notwithstanding the disadvantages in freight rates and exchange which American goods suffer, the imports from the United States into Guatemala are increasing. This is due largely to the growing interest which American manufacturers and exporters are taking in the Central American market. Much more could be done, however, if more favorable freight rates and better banking facilities were established.

The imports from San Francisco apparently have decreased, with a corresponding increase from New York and New Orleans. This is due partly to the apparently higher market of the American Pacific ports, but perhaps even more to the freight arrangements made between the Guatemala Railroad, the Central Railroad, and the United Fruit Co. steamships, by which the carrying is done, to their mutual profit and to the exclusion of the Pacific lines.

Exports to United States.

Statistics covering the imports for even 1910 are not yet available. The following table shows the exports to the United States from the several districts for that year:

Articles.	Total, 1909.	1910					
		Guatemala City.	Champerico.	Livingston.	Ocos.	San Jose.	Total.
Bananas.....	\$170,450			\$331,442			\$331,442
Chicle.....	2,454			412			412
Cedar logs.....		\$708					708
Coffee.....	2,220,085	19,676	\$425,517	119,172	\$279,490	\$716,783	1,500,634
Hides.....	17,487		2,395	15,084	2,256		19,735
Horns.....	20		237	100			337
Mahogany.....	52,632			65,304		16,770	82,074
Orchids.....		565					565
Rubber.....	47,478		66	44,565	260	11,885	56,776
Sarsaparilla.....	42			320			320
Skins.....	12,759		337	11,879	270	4,542	17,029
Sugar.....	42,837		7,320			30,351	46,671
All other articles.....	4,374	95	196	842		26	960
Total.....	2,570,618	21,044	436,068	589,120	282,276	789,357	2,117,066

Industrial Conditions and American Investments.

There have been no important additions to the industries of the country. Prospective investors state that they are awaiting more stable conditions. Mining is practically at a standstill, miners complaining that the obstacles to importation of explosives make development of mines impracticable. Plantations are not developing, owing to the increasing scarcity of labor, thousands of Indians apparently having gone into Salvador, attracted by higher wages, and the difficulty of arranging with the jefe politicos for an assured number of laborers when most needed. The jefe politicos or governors of the Departments receive a salary equivalent to only a few dollars per month and customarily receive 3 pesos per day from the planter for each laborer supplied, of which the laborer is given $1\frac{1}{2}$ pesos, equivalent to about 8 cents gold, per day.

The steady increase in the number of inquiries from Americans interested in the opportunities for investment and industry indicates

an awakening interest in the possibilities of Guatemala. Excellent opportunities are offered to the judicious investor. Money brings 10 to 12 per cent interest, but the investor should first study local conditions before placing his money. In general, large undertakings made money during the past year, and this statement applies also to even smaller mercantile houses whose experience has enabled them to forecast the market and to provide against currency fluctuations.

[From British consular reports.]

Imports into Guatemala.

The only available official source of information regarding the trade of Guatemala is contained in the annual report of the Ministry of Finance, but up to date the statistics even for 1910 have not yet appeared. The following data, which may be regarded as substantially correct, were collected from various sources:

The imports into the Republic for 1910 were valued at \$5,189,271 against \$4,074,302 for 1909. This increase was probably due to the necessity of replenishing stocks which had been allowed to run down in the expectation of a considerable fall in the rate of exchange (an expectation which was not realized) arising from the discussion for an adjustment of the currency, but which is still in abeyance.

Imports and Principal Countries of Origin.

The following table shows the total value of the principal imports into Guatemala during 1910 and the countries supplying the greatest amounts in the order given:

[Abbreviations: United States, U. S.; United Kingdom, U. K.; Germany, Ger.; France, Fr.]

Articles.	Total.	Principal countries of origin.	Articles.	Total.	Principal countries of origin.
Automobiles and parts.	\$42,329	U. S.	Iron and steel, and manufactures of:		
Cotton goods:			Builders' hardware.	\$60,213	U. S.
Piece goods—			Cutlery.	26,445	U. S., Ger.,
Bleached.....	94,046	U. K., U. S., Ger.	Galvanized iron sheets.	82,750	U. S.,
Drills.....	155,393	U. S., U. K., Ger.	Nails and bolts....	20,361	U. S., Ger.
Dyed.....	56,612	Do.	Piping and tubing...	24,727	U. S.
Gray.....	194,369	U. S., U. K.	Railway material....	298,040	Do.
Printed.....	207,425	U. K., U. S., Ger.	Tools.....	68,049	Ger., U. K., U. S.
Other piece goods.	130,846	U. K., Ger.	Wire and manufactures.	43,239	U. S., Ger.
Made-up goods....	203,844	U. K.	Jute bags.....	113,380	U. K.
Threads, sewing....	59,965	U. K., Ger.	Leather and manufactures.	117,088	U. S.
Yarns.....	190,675	U. K.	Machinery.....	121,853	Do.
Drinks:			Matches.....	42,392	Ger.
Beer and cider.....	57,172	Ger., Mexico, U. S.	Oils, mineral.....	134,987	U. S.
Spirits.....	68,073	Fr., U. S.	Oils and paints.....	37,205	U. S., U. K.
Wines.....	94,649	Fr.	Provisions.....	267,409	U. S., principally
Drugs and perfumery...	189,950	U. S., Ger., Fr.	Silk goods.....	222,546	China and Japan, principally.
Electrical apparatus and supplies.	48,913	Ger.	Stearin.....	64,671	Ger.
Flour, wheat.....	315,481	U. S.	Wood and manufactures...	74,249	U. S.
Hats.....	32,133	Do.	Woolen manufactures...	166,600	Ger., U. K.
Glass.....	27,097	Belgium.			

Increased Demand for American Goods.

About \$730,000 of the increase was due to the greater receipts of textiles (principally cotton prints and cotton made-up goods), corn, cocoa, beer, and railway material. The principal countries exporting to Guatemala are the United States, United Kingdom, and Germany. Over 70 per cent of the British imports into Guatemala is in cotton goods, but the receipts of British drills and plain and fancy cotton goods have been declining, while those from the United States and Germany have been increasing.

The United States leads in the exports of iron and steel goods to the Republic, and it is only a matter of a short time before that country will control the market in such goods as galvanized sheets, barbed wire, wire for telegraphs and telephones, wire netting, iron tubing, steel pillars, tinplates, iron bridges, and railway material. There was an increase in the imports of flour, all of which came from the United States,

the receipts amounting to \$273,000 in 1909 and \$312,000 in 1910. The imports of beer also increased, due to the introduction of the Mexican product, which comes into competition with the American and German beers. The Mexican brewers have succeeded somewhat in imitating the taste of the brands with which they compete in this market.

There is a large number of German merchants throughout the Republic, many of whom are engaged in the dry goods and hardware trades, and the greater part of the coffee plantations in the country is in German hands, and therefore their wants are supplied from Germany if possible.

Coffee, Panela, and Banana Cultivation.

The coffee crop of the season 1910-11 amounted approximately to 720,000 quintals (quintal=220.46 pounds) of clean coffee, and the present season is expected to yield about the same amount. Owing to the failure of the beet crops in many countries last season, and the consequent high prices obtained for the Guatemalan panela (brown sugar), it is expected that the output will be much larger this season. The maximum price per hundredweight of 112 pounds paid for panela last season was \$3.28. The cultivation of bananas by the United Fruit Co. in the Lower Motagua Valley, near Puerto Barrios, is rapidly extending.

PANAMA REGISTRY LAWS.

[From Consul General Alban G. Snyder, Panama.]

In order to secure Panaman registry a ship must belong wholly or in part to one or more Panaman citizens resident in the country, or else to a Government official if he resides abroad, but the law does not state how much interest or what part of the vessel such citizens must own.

A ship can not be permanently registered and fly the Panaman flag without coming to some qualified port of the Republic to obtain sailing papers and comply with the formalities exacted by law, but in some instances, upon request, the Government has granted authority to a Panaman consular official to issue temporary sailing papers, the applicant agreeing to change them when the ship comes to Panama. The time for which this temporary certificate is valid is indicated in the authorization issued to the consular officer. Once issued it is not necessary to renew a definite register unless lost, and it can be used for all times for navigating in foreign waters. The owners of a ship registered in Panama may sell or transfer their rights to any parties, but it is understood that the ship's register can not be ceded or transferred with the ship or transferred for the use of another ship.

The cost of registry is collected but once, at the rate of 50 cents for each registered ton or fraction thereof, and there are no other charges upon vessels save those paid to consular officers abroad for services rendered the vessel in accordance with the fiscal regulations. A Panaman consular officer at a port where a vessel flying the Panaman flag enters should immediately visit the ship and is authorized to collect \$2.50 for each visit of inspection so made.

The Colombian dispositions found in the Fiscal and Maritime Codes and other laws additional and reformatory thereof are in force in Panama. Among these law 79 of 1880 requires as a condition for the nationalization of a vessel that the captain or purser and at least half of the crew be Panaman citizens, but this can not be enforced owing to a lack of seamen in the Republic.

Railway rolling stock, worth \$250,000 has been ordered from British firms by the Siamese Southern Railway.

COMMERCE OF THE PORT OF HULL.

● [By Consul Walter C. Hamm.]

The trade of the English port of Hull, which ranks third in the United Kingdom in the volume of its commerce, was unsatisfactory throughout last year, attributed largely to unsettled labor conditions.

There was a large decrease in the exports to the United States, the principal items contributing to the decline being cottonseed, creosote, soya-bean, and other oils, and castor seed, glue stock, linseed, and wool. There was an increase in the shipments of fertilizer, glycerin, potatoes, and linseed and rapeseed oils.

Receipts of Oilseeds and Shipments of Oils.

Conditions in the seed-crushing industry, which is the principal business of Hull, were discouraging, due largely to the small crop of cotton seed in the United States and Egypt. The Indian crop, however, was good. The total receipts of cotton seed into the United Kingdom last year were 596,956 long tons, against 690,171 tons for 1910, of which the receipts at Hull were about 270,000 and 353,000 tons, respectively. There was also a heavy decline in the imports of soya beans, the total receipts into the United Kingdom in 1911 being only 222,657 long tons, against 421,531 tons for 1910, of which 145,362 and 245,829 tons for the two years, respectively, were imported into Hull.

The exports of linseed oil from Hull last year amounted to 4,331 long tons, compared with 3,646 tons in 1910. More than half the shipments were for Australia, being 2,334 tons, followed by India with 532 tons, United States 461 tons, Norway 319 tons, Egypt 175 tons, and Turkey 129 tons. The total exports of cottonseed oil were 7,058 tons, against 12,073 tons for 1910. The principal countries to which shipments were made last year were: Netherlands 1,917 tons, Germany 1,623 tons, Belgium 902 tons, United States 660 tons, Sweden 640 tons, Turkey 426 tons, Italy 262 tons, and Austria 200 tons. The soya-bean oil shipments amounted to 12,248 hundredweights of 112 pounds each, of which the principal exports were made as follows, in hundredweights: Netherlands 3,221, Germany 3,177, Belgium 1,281, Italy 1,165, France 825, Sweden 760, Denmark 269, Austria 259, and United States 114.

Imports of Apples, Oranges, and Tomatoes.

The fruit trade was smaller and less profitable than for some years, due principally to the fact that at the time when the fruits were coming in most abundantly a labor strike occurred, and much of the fruit spoiled in the holds of the ships. There were 36,481 packages of apples imported, against 14,386 packages in 1910, and 335,318 packages of oranges, against 346,610 packages. Most of the oranges come from Spain and Jaffa, but do not compare with the American product.

The imports of tomatoes have increased from 24,381 packages in 1909 to 155,475 packages last year. Hull has special facilities for the distribution of fruit and vegetables to the central counties of England and the Continent, and American shippers could largely increase their exports into this port.

Decreased Receipts of American Wheat and Flour—Other Imports.

There has been a steady decline in the imports of American wheat into this port during the past three years. The receipts from the east

coast in 1909 were 1,631,778 quarters, of 480 pounds each; in 1910, 1,286,838 quarters; and last year 1,221,684 quarters. From the west coast the decline has been still greater, the receipts being 136,851 quarters in 1909, 45,535 quarters in 1910, and 23,884 quarters last year. American flour also shows a decrease in the imports. The total receipts last year were 56,627 sacks, against 65,799 sacks in 1910 and 70,576 sacks in 1909.

The imports of merchandise arriving at this port from New York last year amounted to 122,842 long tons, against 98,883 tons for the previous year. The principal items last year were as follows, in tons: Wheat 67,856, oil 10,916, corn 8,219, bacon 6,888, lumber 4,875, glucose 4,539, sirup 4,313, lard 4,502, castings 964, apples 761, sugar 790, rosin 754, starch 486, cement 438, zinc oxide 416, cheese 370, oil cake 202, flour 141, canned meats 118, and dried fruit 101. The cargoes arriving from Boston amounted to 15,963 long tons, against 15,773 tons for 1910, of which 15,003 tons represented wheat, 520 tons Quaker Oats, 158 tons oats, 108 tons lumber, 57 tons hay, and 58 tons wood pulp.

Shipments to United States—Shipping.

The following table shows the articles and their value invoiced through the American consulate at Hull to the United States during 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Alum.....	\$6,502	\$12,819	Linsced.....	\$227,310	.....
Aluminum.....	6,255	.....	Oils:	.....	.....
Ammonia.....	21,429	18,231	Cottonseed.....	149,258	.....
Castor seed.....	47,457	17,823	Creosote.....	422,540	\$123,197
Chalk.....	.....	2,433	Linseed.....	5,862	33,741
Cliffstones.....	6,276	5,532	Rapeseed.....	31,353	168,592
Creosote.....	13,975	21,579	Soya-bean.....	139,571	47,747
Fertilizers.....	111,889	158,721	Onions.....	29,637	11,133
Fishing tackle.....	2,780	7,981	Paints and colors.....	4,954	5,243
Fish, salt.....	.....	3,609	Potatoes.....	.....	40,315
Glue.....	23,862	1,984	Sealskins.....	10,137	.....
Glue stock.....	56,054	15,420	Sheep casings.....	15,996	4,235
Glycerin.....	2,179	41,889	Soft soap.....	2,253	1,376
Grease.....	17,533	.....	Ultramarine.....	18,685	19,956
Herring.....	16,006	5,403	Washing blue.....	4,840	1,549
Herring, pickled.....	.....	9,629	Whiting.....	6,031	3,580
Hides and skins.....	12,021	18,879	Wool.....	64,738	5,167
Hide cuttings.....	.....	2,539	All other articles.....	279,369	52,263
Iron oxides.....	21,193	21,087			
Leather.....	10,278	6,323	Total.....	1,788,220	890,035

There were \$18,813 worth of dried fish invoiced through the consulate for Porto Rico during last year and \$350 worth of disinfectant fluid for the Philippine Islands.

Of the 5,120 vessels arriving at this port last year, only 63 were from the United States and of those departing 57 were bound for American ports; 97 vessels arrived from South American ports, 90 of which were from Argentina, and 75 vessels departed for South American ports.

Proposed Rubber Exposition in Java.

Consul B. S. Rairden, of Batavia, Java, has been notified by the Director of Agriculture of the colony that an International Rubber Exhibition will be held in Batavia during the first half of the year 1914, under the patronage of his excellency the governor general. The exact date has not yet been decided.

NATIONAL COMMERCIAL ORGANIZATION SUGGESTIONS.

Tentative Outline Plans Offered for Consideration.

The following "Memorandum of suggestions for a national business organization," prepared by Mr. Frank S. Gardner, secretary of the New York Board of Trade and Transportation, has been submitted to the Secretary of Commerce and Labor by Messrs. William M. Carroll, Ludwig Nissen, and C. A. Green, delegates from the New York Board of Trade and Transportation to the conference to be held at Washington beginning April 22. After a preliminary statement with respect to other suggestions which have already been submitted for the plan of organization of a national association, the following suggestions are submitted:

Examples of notably successful national organizations are not lacking. There are those which are exponents of the interests of single branches of business; others are based upon sentimental or altruistic principles; others are educational along special lines, and some unite general classes. The National Geographic Society, with over 100,000 members, the American Forestry Association, and the National Association of Manufacturers are fine illustrations of successful organizations consisting wholly of individual members. The National Association of Credit Men is probably the only truly national and successful business association in which the local association and delegate feature is conspicuous. Even that association has adopted a combination plan and its national association has several thousand individual members who reside in places where no local credit association exists. The plan of the National Credit Men's Association is almost identical with that herein-after suggested.

The study of the form and methods of such successful national associations should enable the new national business association to adopt a plan which has been successful and which might embrace some such general features as the following:

1. The Membership.

The associations mentioned and others furnish warrant for the belief that the new national business organization, if based upon individual memberships, would secure the support of a sufficiently large number of the business men of the country with annual membership dues as low as \$5 or \$10 to produce a revenue that would carry the organization and enable it to perform all its functions. There should be no difficulty in enrolling in such an association at \$10 per year from 20,000 to 100,000 members in the first 12 months. At the lower number a revenue of \$200,000 would be provided.

2. Payment of Dues.

In order to give an assurance of permanency, annual members when joining should be required to pay at least three years in advance, the expenditures each year being limited absolutely to the revenues credited to each such year, and the amount of the two years' advance payments set aside in two funds for use in the years for which they were paid in—for instance, the 1913 fund and the 1914 fund—and these funds invested in approved convertible securities.

3. Other Classes of Membership.

In addition to annual memberships provision could be made for "patrons" at \$500 or \$1,000 each, and for "life" members at \$200 each, and the receipts therefrom put into a special fund and invested and the interest alone used.

4. Branches of National Organization.

The individual membership plan contemplates the election and general enrollment of members residing in every State and in the island possessions. In every city or place where members reside or do business these could be organized into a local branch of the national association. Each such branch having enough members would have its own president and other officers and committees, would hold stated meetings; consider and act upon questions which it originated or upon questions originating with and acted upon by any other branch and sent to all local branches through the central office established in Washington or such other place as might be selected.

5. Annual Meetings.

All the members could have the right to attend the annual meetings, but in order to insure attendance each local branch should be represented in the annual meetings by its president and as many others, in proportion to the membership of the local branch as might be deemed proper.

6. Officers and Executive Committee.

The usual officers, including a president, vice presidents, treasurer, and secretary, should be provided for the national association; also a small executive committee not to exceed 10 members, including the president, to keep in close touch with and have immediate control of the main office and its activities under the general policies of the national association.

7. Administration Advisory Board.

An administration advisory board, consisting of one or not more than two members from each State, should also be provided, whose members at any time might be summoned individually or collectively by the President of the United States or by the Secretary of any national department for conference with reference to national business questions.

It is manifest that such administration advisory board should be composed of men whose knowledge of business interests would make them of the highest value to the President of the United States, the departments, and the committees of Congress. Appointment to such a board would be regarded as an honor and would be much sought. The members of this board from each State might be selected by ballot by members of the national association in such State and nominated to the President of the United States or the Secretary of Commerce and Labor for his approval, or an election in each State might be made final. The method of selecting members of the administration advisory board is a matter of detail.

8. Councils for Trades and Industries.

Specializing along the lines of making provision for the consideration and promotion of the interests of separate trades and industries by experts in each such line, an industrial council could be formed for each industry of men elected by the members of the national association in the industry. Each such council would study the needs of the industry it represented and report to the administration advisory board or to the national association for approval of its conclusions. No such industrial council could bind the association or the administration advisory board to any policy until such policy had been approved by the association or the advisory board. But, without binding the association or advisory board, each industrial council could act for itself upon the matters pertaining to its own industry. The method of selecting the members of each industrial council and the number composing each is a matter of detail.

9. Miscellaneous.

The general plan should comprise definite regulations as to the control of disbursements, the employment of the paid officers, of the managers of the departments and their subordinates; the publication of a weekly or monthly bulletin or magazine; the distribution of special information to those to whom it would be useful, and regulation of such other matters as experience should develop.

The national association should impose upon itself restrictions as to the consideration of any question which, although relating to public national policy, would lead in such a general body to hopeless controversy, or division of purpose, and impair the influence or threaten the permanency of the organization.

The association should not attempt too much. The gathering and distribution of certain kinds of information should be left to the Government bureaus. Much of such information now distributed to associations should be given direct and only to individuals, firms, and corporations interested, and never to associations having a mixed American and foreign membership. Distribution through local associations will often defeat the purpose of the Government. The relations of some of the local associations to foreign manufacturers are as close as they are with American manufacturers.

10. Legislation.

The national organization should be authorized and incorporated under an act to be passed by Congress. It should define its powers and duties, establish its relations to the Government, create the administration advisory board, as an official or semi-official auxiliary to the administration and the departments, provide that the members of such board shall serve for a specified term of not more than four years and without pay, but when members of such board are summoned collectively or individually to advise with the President of the United States or the Secretary of any department between annual meetings of the association, such members of the board should be paid a mileage compensation.

11. Affiliated Associations.

Provision could be made for national associations having single objects becoming affiliated with the national association. But this should be done as a means of

coordinating the effort and influence of these special national associations with the general national body and not as the main dependence of or dominating element in the general body.

The suggestions under this head are made so that no elements which are of any value whatever shall be excluded from participating in benefits to be derived, or from contributing to such extent as they may to the success of the new organization. The plan suggested combines all the valuable features of the local-organization-delegate plan, while not depending upon it for the perpetuity of the association, and would create the organization upon the individual membership plan, which has been shown by experience to furnish a more enduring and stable body with substantial financial support.

CHANGES IN GOTHENBURG SYSTEM REGULATIONS.

[From Consul Stuart J. Fuller, Gothenburg, Sweden.]

The managing board of the Gothenburg System Corporation, at a meeting held in February, decided to place further restrictions, taking effect October, 1912, on the sale of spirits (that is, alcoholic beverages of 25 per cent alcoholic content or over) for consumption otherwise than on the premises where they are purchased. As this step goes much further than any of the others taken by the institution in question, it may be of interest to the American inquirers who have recently been looking into the operation of the laws and regulations in Gothenburg to govern the sale of alcoholic beverages, as described in Special Consular Reports No. 49, issued by the Bureau of Manufactures.

The many restrictions placed on the sale of brännvin for consumption on the premises at the bar rooms operated by the Gothenburg System Corporation have been found to lead to the purchase, in many instances, of excessive quantities of the liquor to be consumed on the streets or in the home of the purchaser. At these places, any sober person, over 18 years of age, may purchase as much as he likes, provided he takes at least 1 liter (1.05668 quarts).

Must Have Permit to Buy Brännvin.

The new regulation is designed to prevent this, and consists in the requirement that purchasers be provided with a permit, good only at one of the company's stores, revocable at the company's will, and without which no spirits may be purchased at any of the company's establishments for consumption otherwise than on the premises of purchase.

It was at first proposed, in order to minimize the abuse in question, to establish a sort of "black list" to whom spirits should not be sold, but it was decided that this would be enforceable only in very small places.

The regulation adopted does not apply to the independent retail liquor dealers, who are sublicensees of the monopoly. These are not allowed to sell brännvin, the particular liquor most subject to abuse, and used to the greatest extent by the lower classes. Thus the new regulation absolutely controls the sale of brännvin for off-consumption. Control of other spirituous beverages is obtained through the already existing provision by virtue of which the monopoly can set the minimum price at which its sublicensees may sell these.

[Accompanying the foregoing report were translations of (1) a discussion by the director of the Gothenburg System of the proposals to reform the system, and (2) of the new regulations adopted; these will be loaned to interested persons. Copies of the special report on the Gothenburg System referred to by Consul Fuller may be procured upon application to the Bureau of Manufactures.]

AMERICAN HOUSE FOR SINGAPORE.

[From Vice Consul General D. Milton Figart, Singapore, Straits Settlements.]

Frequent proposals have been made for the establishment abroad of branches by American manufacturers for handling export trade, but without result, so far as this district is concerned. The following proposition has been under consideration here for many months and has received unqualified approval from all business men to whom it has been submitted:

A limited number of American manufacturers of such articles as pumps, stationary motors, disk plows and other agricultural implements, hardware, etc., might unite to open a permanent branch in Singapore under the management of a trained American, with the assistance of a man secured locally who is familiar with the market.

Each firm should bear a proportionate expense to the amount of business done. This would involve only a small amount of money and would undoubtedly lead to a large volume of business in the Far East. The representative could travel throughout the Peninsula, Siam, and the Dutch East Indies, making his headquarters in Singapore, and could handle a large business on the same basis as it is now handled by local firms. The cost of inaugurating such a scheme would be so small in comparison with the amount expended by many firms for advertising that it is certainly worth the trial, and experienced business men acquainted with this market say without hesitation that such an enterprise would not only be a success but is absolutely necessary if American manufacturers desire to secure a permanent foothold here. Personal representation is indispensable.

This consulate general would like to receive correspondence from any firm which might be interested in this project, and would endeavor to give all the detailed information necessary to enable such firm to come to a decision regarding the matter.

BRITISH EMPIRE COMMERCIAL CONGRESS.

[From the London Times.]

We have received the following from the British Imperial Council of Commerce, inaugurated last year:

"The preliminary program of resolutions to be submitted at the eighth triennial Congress of Chambers of Commerce of the British Empire has now been issued. The congress will meet at Guildhall, which has been placed at the disposal of the organizers by the city corporation, and will be inaugurated by the Prime Minister, the Right Hon. H. H. Asquith, honorary president of the congress, on June 11 next. Lord Desborough, president of the London Chamber of Commerce, is the acting president. The list of honorary vice presidents contains the names of many members of the Cabinet and the opposition and distinguished British colonial administrators, etc., including his Royal Highness the Duke of Connaught (Governor General of Canada), the Earl of Aberdeen, Lord Avebury (president of the second congress, 1892), Mr. Arthur James Balfour, Earl Brassey (president of the fifth congress), Mr. Sydney Buxton (president of the Board of Trade), Earl Cromer, Lord Curzon of Kedleston, Viscount Gladstone (Governor General of South Africa), Sir Edward Grey, Sir William Hall-Jones (High Commissioner for New Zealand), Mr. Lewis Harcourt (Secretary of State for the Colonies), the Marquis of Lansdowne, Mr. A. Bonar Law, Mr. Lloyd George, the Lord Mayor of London, Viscount Milner, Sir George H. Reid (High Commissioner for Australia), Sir Albert K. Rollit (president of the third congress, 1896), Mr. Albert G. Sandeman (president of the fourth congress, 1900), the Earl of Selborne, Sir Richard Solomon (High Commissioner for the Union of South Africa), Sir Albert Spicer, Bt. (president of the seventh congress, 1909), and Mr. J. Herbert Tritton (president of the first congress, 1886). The majority of the 400 British chambers of commerce scattered throughout the Empire are expected to send delegates."

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 582. Panama Canal supplies.**—Sealed proposals, in triplicate, will be received at the office of the General Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., until April 27, 1912, for furnishing the following supplies: Material for steel cylinders, rivets, steel reinforcement bars, babbitt metal, bolster truck springs, pipe wrenches, cable hangers, fire hose, heating boilers, hot-water service heaters, sanitary fixtures, cast-iron pipe and fittings, steel pipe and fittings, brass pipe and fittings, lead bends and "P" traps, valves, cocks, lumber, untreated pipes, and artificial vermillion. (Circular No. 698.)
- No. 583. Electric passenger elevators.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until May 17, 1912, for an electric passenger elevator in the United States post office and courthouse, Great Falls, Mont. Tenders will also be received until May 18, 1912, for an electric passenger elevator in the United States post office, Oklahoma City, Okla., in accordance with drawings and specifications, copies of which may be obtained at the office of the Supervising Architect, Treasury Department, Washington, D. C.
- No. 584. Stone.**—Sealed proposals for furnishing and delivering stone at South and Southwest Passes, Mississippi River, will be received at the United States Engineer's Office, Room 325 Customhouse, New Orleans, La., until April 30, 1912. Further information may be obtained by applying to Lieut. Col. Lansing H. Beach at the New Orleans office.
- No. 585. Electric passenger elevators, hydraulic lifts, and pumping plant.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until May 13, 1912, for two electric passenger elevators, two hydraulic lifts, and pumping plant in the reconstruction of the United States post office, courthouse, and customhouse at Richmond, Va., in accordance with drawings and specifications, copies of which may be obtained at the Supervising Architect's office at Washington.
- No. 586. Dredging.**—Sealed proposals for dredging in Newtown Creek, N. Y., will be received at the United States Engineer's Office, New York, N. Y., until May 8, 1912. Further information on application to S. W. Roessler, Colonel, Engineers.

CENTRAL AMERICA WEST COAST SERVICE.

[From Consul General Harold D. Clum, San Salvador.]

The Salvador Railway Co.'s new steamship, the *Jiquilisco*, arrived at Acajutla on March 6 and has entered the company's service. This steel vessel was constructed on the Tyne, has triple-expansion engines with furnaces fitted for burning oil, and is also provided with electric light; capacity 1,000 tons, and speed 10½ knots per hour.

The Salvador Railway Co. (Ltd.) now has three ships with which it maintains its steamship service between Central American ports and Salina Cruz, Mexico. The *Acajutla*, with accommodations for 24 first-class passengers, makes the direct run between Acajutla and Salina Cruz, leaving Acajutla on the 10th, 20th, and 30th of each month and Salina Cruz on the 4th, 14th, and 24th. The trip each way is made in 36 hours, strictly according to schedule. The *Salvador*, the sister ship of the *Acajutla*, plies between the Guatemalan ports of San Jose, Champerico, and Ocos and Salina Cruz, Mexico. The *Jiquilisco* will serve the ports south of Acajutla as far as Corinto, Nicaragua (principally Corinto, La Union, and El Triunfo), connecting them with Salina Cruz.



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CONSTRUCTION WORK ABROAD.

CANADA.

[From Consul General John G. Foster, Ottawa.]

Welland Ship Canal Construction.

The supplementary estimates for the year ending March 31, 1913, contain a first appropriation of \$200,000 for Welland Ship Canal construction. It is understood that the Welland Canal will be deepened from 14 to 25 feet in its course and to 30 feet in the locks, and that the number of locks will be reduced from 22 to 7. The waterway will be widened from 150 feet to 200 feet, and it is claimed that as a result of these changes there will be a reduction of eight hours in time required for vessels between Port Colborne and Port Dalhousie. It is estimated that the total cost of the completed canal will amount to \$45,000,000.

[From Consul Harry A. Conant, Windsor, Ontario.]

Waterworks—Railroad Construction—Branch Factories.

The chlorine system of treating city water for bacteria was definitely decided on by the Windsor water board on April 2 as a precaution rather than as a necessity. The cost will be about \$1,000. To provide for increased consumption of water the board will install another 8,000,000-gallon pump (cost, \$18,500) at the waterworks station.

The Canadian Pacific Railway will spend about \$90,000 at Windsor constructing a freight shed, 500 by 30 feet, with five tracks, etc. The company proposes to spend about \$600,000 on improvements in the western Ontario division. New freight sheds at Chatham, costing \$50,000, are also planned.

The Windsor Record notes the continual establishment here of American branch factories. "Nearly every large concern in Detroit has a branch on this side. As a result Windsor is deriving over \$3,000 yearly in school taxes on new industries, which are otherwise exempted."

NEWFOUNDLAND.

[Press dispatch from St. Johns.]

Extension of Railroads.

The Newfoundland Government has submitted to the legislature of the colony a proposal to sanction the borrowing of \$2,000,000 in the London market to carry out the Government's policy of branch lines, making, with the \$4,000,000 already borrowed, \$6,000,000 for this purpose. The Minister of Finance explained that the reason the Government had to come to the House for this new loan was that the original estimate of 250 miles was exceeded because it was found necessary to touch at the different settlements. They now estimate the mileage at about 350, and the sum now required would be sufficient to complete the lines.

The Government also proposes to raise \$250,000 to provide telephones and light-houses throughout the colony.

PERU.

[From Consul General W. Henry Robertson, Callao, supplementing report in Daily Consular and Trade Reports for Apr. 5.]

Concession for Building the Ucayali Railway.

The concession for building the Amazon-Pacific, or so-called Ucayali Railway, as modified by the Peruvian Congress, was signed by President Leguia on March 8. The modifications of the original contract of April 11, 1907, provide:

(1) The width of the road is reduced, at the option of the concessionaires, from the standard gauge of 1 meter and 44 centimeters (4 feet 6 inches) to 1 meter (3 feet 3 inches), but the tunnels and cuts are to be made as for a normal gauge. The concessionaires may prefer to construct a broad-gauge road.

(2) A gradient up to 5 per cent is authorized for the section of the road between Goyllarisquisca and the exit of the pass of Tusi.

(3) It is permitted to substitute the construction of the road from Port Wertheman and a point of the line by that of another highway in the judgment of the Government, to which has been suggested the advantage of choosing the one which unites Tambo Colorado, or La Oroya, with the city of Tarma.

Any transcontinental Peruvian railway would permit an interchange of the eastern and western products of Peru within three or four days, instead of their having, as now, to undergo a journey of some 20,000 miles via Europe, covering a period of six months or more. The Ucayali Railway should be completed at least by the time the Panama Canal is to be officially open for the ships of the world, and will enable direct shipment of United States products to be made to the Amazon regions via the Panama Canal, the Pacific Ocean, and the port of Callao, thus materially increasing the commercial importance of this port, which will then be the Pacific terminus of this transcontinental route.

TASMANIA.

[From Consul Henry D. Baker, Hobart.]

Tramways or Light Railways—Fishing Enterprise.

The Premier of Tasmania, Sir Elliott Lewis, in a policy speech at Hobart, states:

The Government proposes to obtain a design for tramways or light railways which will carry produce and passengers at a slow rate of speed and with only a limited regular time table for carrying the bulk of the produce in special trains which will run to meet the requirements of producers when there are goods to carry. This will to some extent take the place of roads and lessen the road construction in some districts. In this way it is hoped that the Tyenna district and the Florentine Valley, in both of which there are large areas of Crown land now withdrawn from selection, will be systematically opened up. If the experiment is successful, the same course will be followed in regard to other areas which now await development.

The agent general of Tasmania in London, in his half-yearly report just issued, mentions:

An effort is being made to form a company, with \$60,000 initial capital, to carry on fishing in all its branches, including supply of edible fish, curing fish, extraction of fish oil, and manufacture of fish fodder and fish guano. It is proposed to erect the first factory on the Derwent River, as near Hobart as practicable.

Mining and Timber Development.

The agent general of Tasmania also mentions:

The manufacture of iron for the Commonwealth is talked about a great deal at present, and mention is made to establish this industry in both New South Wales and South Australia, but those who know all about the past difficulties in the way of establishing this industry in Australia are satisfied that the solution of all difficulties will be found in the creation of the big power scheme of the Hydroelectric Co. of Tasmania. The successful establishment of these works means that the manufacture of iron is more likely to be a success in Tasmania than in any other part of Australia. Mr. Gillies, the chairman of the Hydroelectric Co., is still in London, and is collecting the necessary information to enable him to put a sound scheme for the manufacture of iron in all its branches before his colleagues on his return to Australia early in this year. [This concern has just engaged as construction engineer J. W. Fraser, who has been with the Southern Power Co., of Charlotte, N. C.—B. of M.]

The Mount Balfour Mining & Power Co. is well spoken of, and I believe the amendment recently made in its act by the Tasmanian Parliament will enable it to obtain the necessary capital to carry out its works.

In connection with the timber industry, which has for some reason not developed on satisfactory lines, and where large sums of money appear to have been lost by investors on this side, a brighter future appears to be in view. The Millars Kauri & Jarrah Co., of West Australia, a company that has done much for the development of timber in that State, has secured some of the principal sawmills in the southern part of Tasmania, and has every confidence of being able to make a success of the timber industry in our State, under certain conditions. The first is the provision of an ample cash working capital which it is prepared to invest to enable it to hold timber until it is seasoned and made fit to be placed on the market.

New Furniture and Knitting Factories—New Oil Building.

Emerson Bros. Proprietary (Ltd.), South Melbourne, Victoria, have obtained from the marine board of Launceston a lease of land for erecting a furniture factory.

The Hobart Daily Post contains an interview with H. G. Lloyd, of the Sydney Knitting Co., in which it is intimated that as Hobart offers unrivaled advantages for the manufacture of knitted goods he is ascertaining the possibility of removing the whole of his business to Hobart.

James E. Gunn, of Launceston, is building an oil store at Inveresk, Launceston, for the Vacuum Oil Co. (controlled by the Standard Oil Co.). The building will be of reinforced concrete, 80 feet square, and store 2,000 tons of oil, besides having office accommodation and repair shop. The successful tenderers for the contract are Messrs. James E. Gunn, of Launceston. The Hobart agents for the Vacuum Oil Co. (Burgess Bros.), have accepted the tender of Stabb & Son for the \$15,000 oil store to be built for the company in Salamanca Place. Capacity, 45,000 to 50,000 cases of oil.

ASIATIC RUSSIA.

[From Consul John F. Jewell, Vladivostok.]

A new theater is to be built in Vladivostok by the Clerks' Club.

A strong steam tugboat, of the icebreaker salvage type, fitted with fire pumps, is provided for the Vladivostok commercial port by an appropriation of \$30,000 from the St. Petersburg Government.

Telegraph lines are to be constructed in the north of Asiatic Russia. The budget provides \$154,500 for a line along the seacoast from

Okhotsk to Petropavlosk, Kamchatka, and \$103,000 for a line from Petropavlosk to Ust-Kamchatka. This will also enable the Imperial Bank and the Russian Treasury to make telegraphic remittances to Petropavlosk. Wireless stations will be established at Okhotsk, Tiguil, and Ore.

SCOTLAND.

[From Consul Rufus Fleming, Edinburgh.]

Many New Public Buildings Planned.

The Royal Scottish Museum, Edinburgh, a massive stone structure, is to be greatly extended, at a cost of approximately \$500,000. The work will be undertaken soon by His Majesty's Office of Works, Parliament Square, Edinburgh.

The Edinburgh council has decided to erect a \$40,000 town hall in Portobello (a city ward) under supervision of city superintendent of works, City Chambers.

The Edinburgh school board has prepared plans for five new schools and the extension of several existing ones. The total expenditure for these improvements will probably exceed \$850,000. The construction will be under the direction of the city superintendent of works.

For some time His Majesty's Office of Works has been considering the erection of a large building in Edinburgh for the inland revenue officers, the national insurance act commissioners, the Scottish board of agriculture, the Scottish land court, the Scottish local government board, and the Scottish fishery board. The site and block will cost a large sum. No definite step toward the acquisition of a suitable site has yet been taken. It is not expected that building operations will begin before 1915.

The Edinburgh council will erect new headquarters for the city police and for the weights and measures departments at a cost of \$210,000. This work will not, it is understood, begin before the coming fall. It will be under the supervision of the city superintendent of works.

The county council of Dumfriesshire, Scotland, will construct new county buildings in Dumfries. Mr. J. M. Dick Peddie, 8 Albany Place, Edinburgh, is the architect.

NEW ARMY TRANSPORT VESSEL.

The construction of the United States Army transport *Merritt* has just been finished by the Shanghai (China) Dock & Engineering Co. (Ltd.), the contract price for which was \$325,000. The *Far Eastern Review*, of Manila and Shanghai, publishes an illustrated description of the new vessel, the hull of which is steel. It has three boilers of cylindrical return-tube type, constructed for a working pressure of 180 pounds per square inch, and an hydraulic test pressure of 360 pounds. Twin screws are driven by triple-expansion 3-cylinder surface-condensing engines of ample power for a speed of 12½ knots per hour. The engines are "open-front type," with cylinders carried at front by turned steel columns and at back by the condenser and one separate column. Refrigerating chambers with 18,000 cubic feet capacity, three ice machines, electric plants, and wireless telegraphy are part of the equipment. There is accommodation for 50 passengers and 350 soldiers.

COMPOSITION FLOORINGS OF MAGNESIUM CHLORIDE.

[From Consul General Robert P. Skinner, Hamburg, Germany.]

The report from the Hamburg consulate general entitled "Floorings of sawdust and magnesium chloride," which appeared in Daily Consular and Trade Reports for August 7, 1911, has given rise to innumerable inquiries from correspondents from various parts of the United States, all of whom express a desire for further details. It was stated in the original report that extensive use was being made in Germany of a flooring composition consisting of a solution of chloride of magnesium to which pulverized magnesia is added, together with considerable proportions of sawdust, and which, being skillfully compounded, provided a relatively inexpensive and fairly fireproof flooring material, especially useful in large office buildings and public halls. One inquirer stated that the art of laying these floorings in Germany is far ahead of the practice in America, and asked particularly for the method of coloring the material and of governing its expansion and contraction.

According to my information, there should be neither expansion nor contraction of the material from any cause whatever after a flooring of magnesium chloride is once laid. The very ingredients are such that there is no buckling or cracking due to heat or cold. In Hamburg the composition is mixed and spread where the building operations are being carried on, the prepared dry meal being delivered in bags from the factory and the lye water made on the spot. It is impossible to state the precise rule for the composition of the meal or for the lye solution, these being the manufacturer's secrets and each manufacturer claiming particular merits for his own formula. These formulas are not patented, and there is no doubt that they are all substantially alike. Several manufacturers have expressed a willingness to sell their process, either for the whole of the United States or for restricted territory. One Hamburg firm sold its formula for a small place in southern Germany for \$1,428.

Method of Mixing and Laying.

The mixture of meal and lye water is made in a mortar box, and when a thickness of not more than 2 inches is proposed it is spread and smoothed with a hand trowel; when a thickness of 4 inches is desired, the material is tamped and then smoothed. The amount of lye water used in mixing the meal depends upon whether the flooring is to be simply spread or tamped; if spread the ordinary practice seems to be to use from 4 to 6 buckets of the lye water to 1 sack of meal, the sack apparently containing from 50 to 60 pounds.

These floorings were first utilized in large office buildings in Hamburg, and probably elsewhere, as a basic flooring for linoleum and also for the addition of artificial wood-marble flooring. These wood-marble floorings are substitutes for wood, and the panels are polished like hardwood floors; that is to say, smoothed with steel shavings and given a coating of wax. When linoleum is applied, it is glued to the magnesium-chloride foundation with a linoleum cement, which is said to be composed of copal resin and putty.

In Germany linoleum is never tacked to wood or artificial-stone flooring, as is usual in the United States, but is invariably glued in place, an ordinary flour paste being used when it is applied to wooden floors. Linoleum thus laid is washed afterwards with soap water

and when dry is given a coating of wax, exactly like a hardwood floor. This treatment is the ordinary practice in the large office buildings in Germany, even in hallways where thousands of people pass in the course of a week.

The magnesium-chloride flooring was first considered a particularly excellent foundation for linoleum, and it is only in comparatively recent times that it has been found possible to color it and to lay it so attractively that no linoleum covering is necessary. It is laid tight against the side walls, making the entire floor waterproof. In bathrooms and around toilets it is brought to the edge of the porcelain and the joints are rounded upward, so that no crevices present themselves in which dust or dirt can collect, nor should there be any joint through which water might percolate.

Use of Colors.

The favor in which linoleum is held in this country is such that manufacturers of these new composition floorings have some difficulty in inducing buyers to put down this material, in solid or varied colors, in preference to a similar natural color foundation with linoleum covering, although the cost and wearing qualities of the former method are said to be much in its favor. Linoleum costs in Hamburg about 86 cents per square meter (square meter=1.2 square yards) and the cheapest class of magnesium chloride foundation pavement costs 48 cents, making a total of \$1.34 per square meter against a cost of \$1.19 per square meter for a colored wood-marble floor attractively finished. The new floorings may now be obtained in almost any color, or in mottled colors. When mottled colors are desired, the different colored mixtures are prepared separately and tamped in together as the floor is laid. Special dyes are required for these operations, and there are a number of manufacturers who produce them. [The addresses of several may be obtained from the Bureau of Manufactures.] In a general way, from 7 to 10 kilos (15.4 to 22 pounds) of color are necessary for 220 pounds of mortar. The proportions vary with the strength of coloring desired. The colors themselves are of different prices. One manufacturer quotes red, blue, black, and brown at \$4.76 per 220 pounds; oxide green, \$53.55; and blue, \$19.04 to \$21.42 per 220 pounds. Another manufacturer quotes red dye, very much in demand, at an average price of \$3.81 per 220 pounds. The prices again vary with the quantity ordered. The more delicate tints, such as green and blue, are more sensitive to light, particularly if exposed for a long time, than the quiet colors, such as black, red, and brown. Red is especially favored, and the many different shades are said to be absolutely unchangeable. Most of the manufacturers of these dyes also supply dyes for cement tiles, stucco, imitation marble, sand-lime bricks, and cement blocks.

Advantages Claimed.

One Hamburg manufacturer claims for his own composition that it is crack-free under all circumstances, warm under foot, elastic, and sound proof, preferable to linoleum, as linoleum curls at the edges after a time, breaks or wears away, and absorbs water, permitting it to leak through. This same manufacturer submits a certificate of examination from the royal board of examiners of material

in the Technical High School in Berlin, dated November 19, 1906, reporting as follows on the examination of samples of his material:

1. After the sample plates were soaked in water and had been exposed to frost 25 times at 15° C. below zero the samples remained unharmed.

2. After the plates had been lying in water for eight days a very small proportion of water (9 per cent) had been absorbed.

3. After the plates had been attached to a vessel containing water—after 24 hours, none; after 48 hours, 2 cubic centimeters, or 5 per cent; after 72 hours, 4 cubic centimeters, or 10 per cent, of moisture had been absorbed.

This manufacturer also claims that in this country his composition is cheaper than pine flooring, tiling, or stone; that it may be used to cover old worn-out wood and stone-plate floorings, staircases, and the like without the necessity of removing the old floors. Wherever a foundation is firm and dry it may be laid without any complicated preparations. Finally, it may be cleaned with cold water and only very seldom should lukewarm soap water be applied. After complete cleansing and thorough drying the flooring should be rubbed with raw linseed oil or should be waxed.

Cost of Raw Materials.

Magnesium chloride, the chief ingredient of these compositions, is worth, in 50-ton lots, in casks of 880 pounds f. o. b. Hamburg, \$11.50 per ton fused. If in lesser lots, \$12 per ton. Greek calcined and powdered magnesite, in barrels of 396 to 440 pounds, is worth \$33.32 to \$35.70 per 2,200 pounds f. o. b. Rotterdam. Raw magnesite, in casks, is worth \$30.94 per 220 pounds f. o. b. Hamburg.

NORTHERN ARGENTINA CROP REPORT.

[From Consul Robert T. Crane, Rosario, Mar. 7, supplementing report from Buenos Aires in issue for Mar. 21.]

The harvests of wheat and linseed were completed and thrashing well advanced throughout the northern half of Argentina during February. The almost entire cessation of freight movement from January 7 till nearly the end of the second month on account of railway strikes prevented any large quantity of grain from arriving at the commercial centers. Reports from the thrashing, however, confirm the preexisting general opinion that wheat will yield an average crop, which is about 2,250,000 tons, or 54 per cent of the country's output, and that linseed will fall below the average, which amounts to about 500,000 tons, or 81 per cent of the total output. It is said that the average weight of the wheat received in Rosario to the end of February is quite low—65 to 66 kilos per hectoliter (about 50 pounds per bushel). The linseed is said to contain so much weed seed that delivery at the established allowance of 4 per cent will not be possible. The rains flattened the crop, permitting the weeds to outgrow it, so that much had to be cut with mowing machines.

The prospects for a record corn crop are well assured. Weather conditions have been favorable throughout the period of its growth, and no damage has been done by locusts. Harvesting commenced at the end of the month and extraordinary yields are reported therefrom. The average corn crop for five years preceding 1911 was 2,000,000 tons for the district, or 52 per cent of the country's production.

ENGINE GAS FROM PEAT.

[From Consul General A. M. Thackara, Berlin.]

The production of gas from peat having a low water content (up to about 20 per cent) for use in suction gas (sauggas) engines has already met with considerable success in Germany, but for a number of years efforts have been made to utilize peat with a water content as high as 50 to 60 per cent and thus eliminate the costly process of drying the raw material.

Difficulties have been encountered in preventing a loss of calories through radiation and other causes, and in getting rid of the dust and tar vapors carried over by the gases to the engine; but great strides have been made recently in overcoming these obstacles. Peat with a water content up to 60 per cent has been found to be a suitable fuel. Owing to its great porosity and low specific gravity it prevents a large combustion surface in the generator, so that the oxygen in the air used as a draft can easily unite with the carbon of the peat.

One of the great difficulties is to eliminate the tar vapors that clog up many of the working parts of the engine. The passing of the gas through the wet coke washers and dry sawdust cleansers does not appear to have thoroughly remedied the evil. Efforts were therefore made to remove the tar-forming particles of the gas in the generator itself or to render them harmless. That of the Aktien-Gesellschaft Görlitzer Maschinenbau Anstalt und Eisengiesserei, of Gorlitz, was displayed at the exposition at Posen in 1911. The gas from the generating plant was employed in a gas-suction engine of 300 horsepower used to drive a dynamo for developing the electric energy for the exposition. The fuel used was peat with a water content of about 40 per cent. The efficiency and economy results obtained were very promising.

Design of the Generator—Advantages.

The generator consists of a vertical sheet-iron or steel cylindrical furnace with double walls; it is about 12 feet high and the diameter is a trifle more than 6½ feet. The interior wall is lined with fire brick. The sides of the furnace are pierced with six slanting apertures about 6 inches in diameter that may easily be opened or closed and serve for inspecting the interior combustion chamber and cleaning the fire. The fuel is fed into the furnace through a lid on the top of the cylinder; draft air enters through hollow cast-iron feet. In an opening in the center of the cast-iron bedplate there is fitted a cast-iron tube that extends below to the water in the foundation and above to the center of the combustion zone about where the peat is converted to ashes. At the bottom the tube is connected to a pipe leading to the scrubber through which the gas passes on its way to the engine.

The advantages claimed for the Gorlitz engine are that the sulphurous gases and those containing great quantities of tar products are drawn down by the suction of the engine through burning masses of peat and thus rid of their deleterious constituents. The air for combustion purposes is well heated before entering the combustion chamber, thereby producing economical results. It is claimed also that the gas produced by its system is so free from impurities that the cleaning and drying apparatus may be of the simplest kind.

The Gorlitz Engine—Cost of Power.

The engine exhibited at Posen by the Gorlitz company was a double-working, four-cycle, one-cylinder suction gas motor, with a cylinder diameter of 25.59 inches, length of piston stroke of 29.53 inches, and diameter of piston rod of 6.7 inches. The piston is water cooled and provided with ribs that serve to direct the circulating water into the proper channels. All parts of the engine are easily accessible and all stuffing boxes are provided with metal packing. Probably the most notable feature of the Gorlitz engine is the governor, which automatically admits the correct charge into the cylinder and maintains a proper mixture at all speeds and loads, even when the engine is running light. The governor is also connected with the igniting apparatus so that there is always a proper ignition.

The cost of the peat used (water content, 40 per cent) was \$0.57 per metric ton (2,204.6 pounds). In two trials the consumption per kilowatt-hour obtained was 3.43 pounds for the first trial and 5.31 pounds for the second.

[Four reviews in German on the manufacture of gas from peat, and also two sectional drawings of the Gorlitz generator, may be had from the Bureau of Manufactures.]

NEW URUGUAYAN FISHING INSTITUTE.

[From American Minister Nicolay A. Grevstad, Montevideo, Uruguay; see also Daily Consular and Trade Reports for May 23 and Nov. 11, 1911, and Feb. 10, 1912.]

The Institute of Fisheries (Instituta de Pesca) was established March 1 at Punta del Este, Department of Maldonado, by the Minister of Industries, Dr. Eduardo Acevedo.

Mr. John Wisner, who recently arrived from the United States, under a 3-year contract with the Government of Uruguay, is director of the institute. He thinks that a great deal can be done to increase the output of the fisheries in this country.

The institute is installed temporarily in the customhouse at Punta del Este. Mr. Wisner will prepare complete plans for the work of the institute, including an outline of the requirements as to buildings, ships, boats, etc. He is now making a preliminary survey of the coasts of Uruguay in the gunboat *18 de Julio*. Mr. Wisner may also be charged with the supervision and management of the seal rookeries of Uruguay.

[From Consul Frederic W. Godling, Montevideo.]

Mr. Wisner, the American fisheries expert, and Messrs. Wilbur Mansfield Ball and Ernest Fiske Cole, dry-farming authorities, who were recently engaged by the Uruguayan Government, have assumed charge of their work. The latter two, who are now stationed at the Toledo Experiment Station, will soon be transferred to the Agricultural College at Sayago.

Arrangements have been made for employing another fisheries expert and two geologists, all Americans.

The Franco-Japanese Bank is being organized at Tokyo, the Industrial Bank of Japan, the Banque de Paris, Crédit Lyonnais, Comptoir d'Escompte, and Société Générale participating.

STEAMSHIP LINES TO TAHITI.

[From Consul North Winship, Papeete.]

The *Mariposa* of the Oceanic Steamship Co., San Francisco, which, since July, 1902, has been making regular trips from San Francisco to this port and return, made its last trip to Tahiti in January, 1912.

On August 29, 1910, the contract with the French Colonial Government was renewed for three years, much to the satisfaction of every one in Tahiti. However, in December, 1911, the Oceanic Steamship Co. asked the governor of French Oceania to relieve them from the contract. This was refused by the governor after consulting with the chamber of commerce; whereupon the Oceanic Steamship Co. took the *Mariposa* off the run and sold the vessel. Although no conclusion has been reached, it is thought that the Oceanic Steamship Co. will pay about \$10,000 to the colonial government as settlement.

This left Tahiti entirely dependent upon the Union Steamship Co.'s line, making a 28-day schedule between Tahiti and Wellington, and Tahiti and San Francisco; and another line of the same company making 28-day trips between Auckland and Tahiti.

The vessels running to America remain in this port only 24 hours, and there is a lapse of three weeks between the arrival of the mail and freight from the United States before there is a northbound vessel by which to answer letters or place new orders. Since the United States enjoys half of the foreign trade with this colony, and as all the mail from and to France is sent via the United States, the present schedule is most unsatisfactory both for the French Government and the merchants. On the other hand, it is convenient for promoting the interests of New Zealand and Australia, there being only 10 days between the arrival of the vessels from Sydney and Wellington and the return vessel; besides, the *Matai* comes here every 28 days from Auckland, bringing and returning with mail and freight, this vessel also calling at Raiatea and other smaller islands of this colony.

Under these circumstances it is evident that New Zealand will secure a large quantity of the orders and products that should go to America. In view of this fact, G. A. Moore & Co., of San Francisco, who for years have been sending the *S. N. Castle*, a sailing vessel of 514 tons to Tahiti, intend placing another sailing vessel on the run, but since the trip one way usually takes about 40 days, the service will not begin to take the place of the *Mariposa*.

For the present year at least the Union Steamship Co. states that no improvement can be made in the schedule as published. It is therefore quite possible that if any American companies wish to bid for the future mail contract of this colony, Monsieur A. Bonheure, governor of the French possessions in Oceania, Papeete, Tahiti, Society Islands, will be interested in hearing from them in the near future.

The subsidy paid the Oceanic Steamship Co. was \$30,291 a year, the contract calling for a vessel of at least 3,000 tons, with a minimum speed of 13 knots, and which would make 10 round trips each year. The *Mariposa*, therefore, made the voyage one way in 12 days, remaining 8 days in San Francisco and 4 days in Papeete.

[The complete schedule of the Union Steamship Co. may be secured from the Bureau of Manufactures.]

GERMAN RAW SPIRIT MARKET.

[From Consul General Robert P. Skinner, Hamburg.]

There are now some indications that the German demand for raw spirits from the United States will be permanent, as a result of a change of policy in Russia, which country at present supplies practically all of Germany's spirit imports. The Society of Russian Manufacturers of Spirit, in reply to an inquiry regarding the intention of the Russian Ministry of Commerce and Industry to establish a storage warehouse in Hamburg to handle the German trade, made the following statement, dated March 8, 1912:

The news concerning the foundation of a Russian storage warehouse is an invention, as there is no need for such an establishment for the Russian trade, and for the further reason that this year Russia is unable to export, the Russian State Alcohol Monopoly being in need of large quantities to cover its demands, higher prices being paid here than by exporters. The plan referred to, furthermore, is not contemplated for future execution; on the contrary, it is to be expected that from January 1, 1913, and thereafter no Russian spirit will be exported to foreign countries, as the Russian Minister of Finance intends to make propositions to legislative bodies looking to the cancellation of the export premiums from January, 1914, and thereafter.

This indicates that the German market is affected not merely by poor crop conditions but by the probable cessation of an average annual import of 15,000 tons of Russian spirit. Hence importers in Hamburg, where nine-tenths of this business is concentrated, are looking to the United States for future supplies and hesitate to advance further the already high prices. The most recent German statistics of alcohol exports and imports are as follows:

Countries.	1910	1911	Countries.	1910	1911
IMPORTS.			EXPORTS—continued.		
	<i>Met. tons.</i>	<i>Met. tons.</i>		<i>Met. tons.</i>	<i>Met. tons.</i>
Great Britain	2,210.8	1,181.4	Norway	551.6	194.5
Russia	13,138.0	10,603.8	Switzerland	1,813.6	1,143.7
All other countries	1,004.8	570.4	French West Africa	1,517.1	1,475.7
Total	16,353.6	18,355.6	Morocco	207.8	640.0
EXPORTS.			Portuguese West Africa	507.7	568.5
Great Britain	1,623.7	1,143.5	All other countries	2,016.9	2,133.8
			Total	7,638.4	7,299.7

Freight Rates from England to Canada.

Consul Gebhard Willrich, of Quebec, Canada, reports that the freight rates from English ports to Quebec are invariably higher than to Montreal, although the former port is touched first by the trans-Atlantic liners. All freight is shipped to Montreal, and then returned by rail or water to Quebec. On steel rails, for example, the freight quoted by one steamship company from Liverpool or Glasgow to Montreal is 7s. 6d. (\$1.825) per ton, while the rate to Quebec is 10s. (\$2.433) per ton. On pig iron the rate per gross ton is 12s. 6d. (\$3.042) to Montreal and 15s. (\$3.65) to Quebec. [A list of the freight rates from London, Liverpool, and Glasgow to Montreal, Quebec, Niagara Falls, Windsor, and Fort William, on cast and wrought iron pipes, billets, blooms, pig iron, and rails, may be obtained from the Bureau of Manufactures.]

GEOLOGICAL NOTES FROM MOROCCO.

[From Consul General Maxwell Blake, Tangier.]

The following notes concerning the geology of Morocco are of interest in view of the fact that present conditions in Morocco are likely soon to permit the inauguration of long-proposed railway projects, which will result in the development of the country. These are not offered as of authoritative nature, but are generalizations gathered from persons of more or less experience whose observations have carried them into various parts of Morocco.

The general geological formations are of Paleozoic age, with outcrops appearing in the high ridges of the Atlas hinterland, and again in the vicinity of Casablanca and along the Mediterranean Sea from Ceuta to Alheucemas. The wide areas between these outcrops are composed mostly of Tertiary sediments, between which are irregular layers identified as Mesozoic. Granites are abundant in the vicinity of Marrakesh, but northeast of that place they disappear or develop into melaphyres. Of igneous rocks of the Tertiary period, basalts and andesites have been reported. Copper, lead, antimony, manganese, and iron ores have been repeatedly discovered, while gold is said to exist in the regions of Sus.

In the Tertiary sediments, large deposits of salt are obtainable and the possibility of extracting potash salts is said to be favorable. In the outcroppings near Melilla, rock salt exists in association with large deposits of iron ore, reported to be of high quality. Deposits of gypsum are abundant in various places.

Mineral Claims Being Secured.

The opportunity for developing the mineral resources of the country is being eagerly awaited by persons who have secured denunciations. These denunciations signify that the mineral wealth within a radius of 4 miles of a certain point has been filed upon as the maximum which any individual may claim upon preemption. The only requirement for such a claim is an authorized survey by some qualified mining engineer acceptable to the legations of the nations concerned, and the filing of maps and reports of the discovery with the legation of the claimant.

Pending the promulgation of an international mining law, which has been under advisement and discussion by signatories to the act of Algeciras, including the United States, no mineral rights have yet been definitely acquired, but allocation of them is to be recognized upon priority by international adjudication. Already four or five mining syndicates have been organized, but only the preliminary field work has so far been attempted.

Owing to the experienced character of some of the persons who have interested themselves in the mineral exploitation of the country, present expectations do not appear to be speculative, especially as regards the existence of copper and iron.

In view of the accessible location of Morocco and its extensive coast line, both along the Atlantic and the Mediterranean, mineral wealth, in whatever part of the Empire it may be found, is not likely to encounter serious transport difficulties, especially should the building of initial railway enterprises be given materialization. In any event, present conditions appear to warrant serious inquiry on the part of responsible persons in the United States interested in mining developments.

LOWER POSTAGE RATES IN OCEANIA.

[From Consul North Winship, Tahiti, Society Islands.]

On December 29, 1911, a new postal convention between Great Britain and France was signed at Paris, modifying the tax on letters sent from French possessions in Oceania to New Zealand and on letters sent from New Zealand to French Oceania. The Cook Islands are included with New Zealand, but this convention does not extend to Australia.

All letters sent from French Oceania to New Zealand or from New Zealand to French Oceania shall pay 2 cents per ounce or fraction thereof, instead of 5 cents per ounce or fraction and 3 cents for each additional ounce or fraction thereof as formerly paid. This convention is effective from February 21, 1912, and will remain in force until six months after one of the contracting parties shall give notice to the other of its intention to discontinue same. This will prove a factor in encouraging and promoting trade with New Zealand.

A large percentage of the mail for Tahiti from the United States is still understamped through ignorance or indifference, causing double tax to be paid at this end and a delay in the receipt of mail.

LEVANTINE BUSINESS NOTES.

[From the Near East.]

Egypt's purchases.—Egypt is buying largely everything required for modern buildings of reinforced concrete, particularly girders and angle irons. It is importing, via Alexandria, large quantities of cement and distempers; also colors for manufacturing these washes, which are superseding oil paints and varnishes.

The sporting-gun trade in Greece is in the hands of the French. Of the 4,000 imported yearly, more than 3,000 are of French make, and include single and double M. L., as well as modern breechloaders, the latter of 12 and 16 gauge. French agents do the selling, and payments are made by bills at four or six months or for cash less 5 per cent.

The National Bank of Egypt opened a branch at Wad Medani in February. Wad Medani is the center of an important agricultural region, and the new branch bank augurs well for its trading future. El Obeid, which is bound to become the gum center for the Sudan, thus depriving Omdurman of one of its many commercial features, is a likely place for a second branch of the national bank.

Cattle exports increasing.—I referred previously to the phenomenal development of the cattle trade in the Sudan, most of which goes to Egypt. The returns show that the total value of cattle exported during 1911 amounted to \$1,300,000, as compared with \$550,000 in 1910 and \$200,000 in 1909. A further development can be safely anticipated. If the present rate of increase is maintained next year exports may amount to \$2,500,000.

Agricultural cooperative societies.—A specialist from the Ministry of Agriculture at Paris, Mr. Joseph Ribet, inspector general of agricultural credit and cooperation, has drawn up on behalf of the Khedivial Agricultural Society a general scheme for the organization in Egypt of agricultural cooperative societies. Mr. Ribet spent four months in Egypt, and it is hoped that his report will meet with careful consideration from the Government.

Gold mines of Abyssinia.—The Bank of Abyssinia, an offspring of the National Bank of Egypt, has offered \$15,000 for one of the gold mines of Zeroudachi. Abyssinia not only has great possibilities in agriculture, but also extensive deposits of gold, iron, copper, sulphur, coal, etc. The railroad now under construction from Dire-Dawa to Addis Ababa, the capital, will be completed in two years. With this will come the development of the country.

A steel-casting plant (Tropenas) has been established in Panama by the Isthmian Canal Commission, the output of which will be about 20 tons per month.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8592. Dry dock.**—Sealed proposals will be received at the Public Works Department, Ottawa, Canada, until July 2, 1912, for constructing a dry dock in the port of Quebec. The dimensions of the dock are to be not less than 1,150 feet usable length, 110 feet clear width at entrance, and at least 37 feet in depth over sill and keel blocks at ordinary spring tide, and to be in three compartments. For further information address R. C. Desrochers, Secretary Department of Public Works, Ottawa, Canada.
- No. 8593. Chemicals.**—An American consul in Germany has forwarded to the Bureau of Manufactures the names of two firms in his district which desire to represent American manufacturers in all kinds of chemicals. Correspondence in English.
- No. 8594. Jam factory, bottling plant, and cannery.**—An American consular officer in Canada has forwarded to the Bureau of Manufactures the names of the promoters of a jam factory, bottling plant, and a cannery to be established in his district.
- No. 8595. Silk hosiery.**—A firm in Australasia requested an American consul to place it in communication with manufacturers of silk hosiery in the United States, as the firm believes that the American article might be of better quality and the prices more reasonable compared with that handled at present. Samples of American hosiery are desired.
- No. 8596. Harbor improvements.**—American Consul Abraham E. Smith, of Victoria, British Columbia, reports that the Dominion Government has approved the recommendation to construct at once a breakwater from Ogden Point at a cost of \$1,250,000; an immediate survey of the ocean harbor to find the cost of building wharves, and that as soon as the survey is completed a pier be built at a cost of \$400,000; also the construction of four additional piers and a ferry slip for railway cars. The total cost of all the improvements will reach about \$7,000,000. The sum of \$500,000 has been appropriated for preliminary work. Tenders for these undertakings will be invited.
- No. 8597. Textile goods.**—An American consul in Germany reports that agency firms in his district cover a large area to visit the leading merchants in their respective lines. The consul has forwarded the names of firms interested in textile goods which desire the agency for American lines.
- No. 8598. Lead seals and sealers.**—A firm in Australasia informs an American consul that it is desirous to take up an agency for the whole of Australia in lead seals and sealers for mail bags, meters, milk cans, etc. Catalogues, prices, and discounts from American manufacturers in these lines are solicited. Bank references may be furnished.
- No. 8599. American agencies in Argentina.**—An American consular officer in Argentina has forwarded to the Bureau of Manufactures the name of a firm requesting the addresses of exporters in the United States desiring to establish agencies in that country. Correspondence in English.
- No. 8600. Coal.**—An American consul in one of the South American countries reports that the prospects are good for the introduction of American coal on that market. The consul states that some 50,000 tons of coal are consumed annually by public institutions in that country.
- No. 8601. Insulated cream carts and cans.**—A business man in Australia writes an American consul that there are some specially insulated cream carts and cans in use in the United States which have not been introduced into that country, but which if sold at reasonable prices would revolutionize dairying in outlying districts. The consul states that American manufacturers of insulated cream carts would do well to communicate with the person, whose name is on file in Bureau of Manufactures.
- No. 8602. Yarns, threads, and ribbons.**—An American consul in Germany has forwarded to the Bureau of Manufactures the name of a business man in his district who desires to secure an agency for American yarns, threads, and ribbons. The consul states that some of the agency firms cover a large territory, thus coming in contact with numerous merchants in their respective lines.

- No. 8603. Dried fruit.**—An American consul in one of the European countries reports that responsible shippers of dried fruit, especially evaporated apples, could find a ready sale for their fruit to members of the wholesale grocers' association of the district in which he is located. The consul states that at least 50,000 boxes of dried apples of 50 pounds each and about 5,000 boxes of dried plums are sold there annually, and he would be pleased to put American fruit shippers in touch with the wholesalers who would import direct.
- No. 8604. Railway material.**—American Consul General John P. Bray, of Sydney, Australia, reports that the Federal Cabinet has decided to call for tenders in Australia and London, to be submitted by May 29, for 135,000 tons of steel rails and fishplates for the West Australian Railway. The specifications (for which \$5.10 is charged for each plan) calls for rails made by the open-hearth process. The line will be 1,063 miles long and will be constructed by day labor. The Government is also inviting applications for two engineers to have charge at each end of the line (Port Augusta, South Australia, and Kalgoorlie, West Australia). Materials such as fishbolts, nuts, dog spikes, etc., are to be supplied by manufacturers in the Commonwealth.
- No. 8605. Pianos.**—A director of an American chamber of commerce in the Levant reports to the Bureau of Manufactures that there is a market in that district for about 100 good pianos selling for about \$200, and that American piano manufacturers should get in touch with him.
- No. 8606. Novelties and specialties.**—An American consular officer in South America forwarded the name of a business man in his district who is the agent of a trading company and who is desirous to secure the local agency for American novelties and specialties.
- No. 8607. Office furniture.**—A manager of a firm in Norway, after his attention was directed to the office equipment of an American consulate, especially the roll-top and typewriter desks, requested the consul to have forwarded the firm catalogues and price lists of office furniture manufactured in the United States.
- No. 8608. Fruit.**—An American consul in Germany has forwarded to the Bureau of Manufactures the name of a business man in his district who solicits the agency for American fresh, dried, and canned fruit. The consul states that there are excellent opportunities in that district for American goods.
- No. 8609. Cotton and gauze.**—The Bureau of Manufactures is in receipt of a communication from a director of an American chamber of commerce in the Levant stating that there is a demand for cotton and gauze for use in hospitals. They should be of the best quality and moderate prices. It is not necessary that they be sterilized.
- No. 8610. Agency for shellac and varnishes.**—An American consular officer in Canada has forwarded the name of a firm which desires to secure the agency for a Province in American lines of shellac and varnishes. References are furnished.

The New Mexican Budget.

The Mexican Chamber of Deputies has passed the new budget for the fiscal year ending June 30, 1913, which provides for an increase of \$2,870,000 (American currency) over the current year. The total is \$55,500,000, divided chiefly as follows: Executive, \$129,000; legislative, \$634,000; judicial, \$348,000; foreign relations, \$1,020,000; gobernacion, \$7,316,000; justice, \$824,000; public instruction, \$4,042,000; fomento, \$2,042,000; hacienda, \$17,500,000; war and marine, \$14,900,000.

A description of the Russian ice breaker *Yermak*, used to keep navigation open in the Gulf of Riga, is forwarded by Consul William F. Doty, of Riga, Russia, and will be loaned upon application to the Bureau of Manufactures. A description of the new ice breaker *Peter the Great* appeared in Daily Consular and Trade Reports for March 29, 1912.

EFFECTS OF BRITISH COAL STRIKE.

[From Commercial Agent Archibald J. Wolfe, Mar. 27.]

In the fourth week of the British coal strike, the number of persons thrown out of work by the shutting down of factories and furnaces on account of coal shortage reached 1,070,730, not including the strikers, divided among the different sections of the United Kingdom as follows: North of England, 516,200; Midlands, 125,500; south of England, 54,410; south Wales, 136,500; north Wales, 45,000; Scotland, 187,720; Ireland, 4,800. In addition, 392,200 workers had been placed on part time up to March 27.

The loss of the railways due to reduced freight and passenger traffic in the first three weeks of the strike is figured at \$9,000,000, and the falling off is expected to reach \$12,500,000 before normal conditions prevail. The cotton industry of Lancashire was not very seriously affected, as far as actual stopping of work is concerned, on account of the early accumulation there of vast quantities of coal, but the doubling of the coal price cut severely into profits. A trade paper places the extra cost of operation for an 80,000-spindle spinning mill at \$400 a week.

On March 18 the railways ceased to accept iron ore, pig iron, and many other kinds of raw material for shipment, and many foundries and furnaces were forced to close. There is a prospect that the loss of some of the trade which has gone to other countries as a result of the strike may be permanent.

[From Consul C. Ludlow Livingston, Swansea, Wales, Mar. 21.]

Tin-plate Mills Closed.

Nearly all the tin-plate mills in this district have been forced to shut down, owing to the shortage of coal, and those still running will close by the end of this week. Practically all the black plates on hand at the various mills have been used, and it will require weeks after the end of the strike before the mills can be run in full force. American tin-plate manufacturers should avail themselves of the present opportunity to enter foreign markets where the Welsh makers will be unable to fulfill their contracts. There also seems to be an opportunity for the makers of black plates to secure orders from the Welsh mills for unfinished plates, as the mills will probably need stocks when they renew operations.

Considerable alarm is felt by the tin-plate makers here over the fact that several of the bituminous coal mines closed during the strike will not be reopened, owing to injuries through lack of repairs. It is certain that a considerable quantity of bituminous coal will be off the market here, and it is feared that scarcity of annealing and milling coals will add to the cost of production.

[The names of two commission agents dealing with the local tin-plate works may be obtained from the Bureau of Manufactures.]

Dentists.—Canadian openings are said to exist at Redditt in Ontario, Rivers in Manitoba, Bigger, Kelliher, Landis, Nokomis, Scott, and Semans in Saskatchewan, and Chauvin, Edson, Holden, Jarrow, and Viking in Alberta.

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ASBESTOS IN FOREIGN COUNTRIES.

GERMANY.

[From Consul General Robert P. Skinner, Hamburg; see also Weekly Consular and Trade Reports for June 11, 1910.]

The Hamburg market for raw asbestos is of some magnitude, as will be perceived from the following statement of importations from the countries given and average prices during 1910:

Countries.	Tons.	Average prices.	Countries.	Tons.	Average prices.
United States.....	5,810.7	\$64.26	Russian Black Sea ports....	25.5	\$60.64
Canada.....	5,219.5	57.12	Italy.....	3.0	228.48
British South Africa.....	1,018.8	149.94	France.....	.4	.....
Asiatic Russia.....	172.3	102.34	Other countries.....	44.4	52.36
Russian Baltic ports.....	2,151.2	147.56			
Great Britain.....	126.2	116.62	Total.....	14,598.6	.....
Belgium.....	20.6	83.30			

These average prices cover both fibrous and amphibolic material, and therefore do not reflect the market value of the latter variety, which commands from 50 to 90 marks (\$11.90 to \$21.42) per metric ton of 2,204.6 pounds c. i. f. Hamburg, including bags. The material should be shipped in pulverized condition, and correspondence should be accompanied by samples and quotations. [Names of dealers are on file in the Bureau of Manufactures.]

Patented Methods of Asbestos Manipulation.

According to German patent No. 144,162, finely ground asbestos is worked into a plastic mass with sulphate of aluminum and a solution of agar agar. The resulting paste adheres well to the covering material, sets rapidly, and does not split. The addition of the aluminum salt makes the cement fireproof. By the addition of resin oil or glycerin, the paste is rendered more elastic.

German patent No. 148,936 contemplates the pressing of milled asbestos without the presence of cement. The asbestos is heated to a point below that of vitrification to obtain this result. Improvements on this process are provided in additional patents Nos. 156,794

and 160,981. According to the first improvement, the asbestos paste is saturated with a sulphuric acid of 25 per cent, dried, and then worked according to the prescriptions of the chief patent. The second additional patent contemplates the impregnation of the ready-prepared material with glass in solution (*wasserglaslösung*), the asbestos having been subjected to the heating previously prescribed, whereby an acid-proof silicic-acid impregnation is sought.

Manufacturers interested in the subject can always obtain full copies of German patents by paying the small fee fixed by the German Patent Office.

[From Consul George Nicholas Ifft, Nuremberg.]

No Manufacturers of Asbestos Products in Bavaria.

There are no establishments turning out asbestos products in Bavaria, but several firms [whose names are obtainable from the Bureau of Manufactures] use more or less asbestos in connection with their production of railway cars, fireproof doors, safes, etc.

In the year 1910 Germany imported asbestos valued at \$897,000. Of these imports \$481,950 worth came from Canada, \$171,836 from Russia, and \$122,000 from South Africa. The exports of asbestos products from Germany for the same period amounted to \$169,000.

SWITZERLAND.

[From Consul George Helmrod, Berne.]

Switzerland's imports of asbestos and mica (the customs statistics do not separately state the figures for these two minerals) in 1910 amounted to: Raw, \$125,000, largely from Russia and British India, with \$300 worth from the United States; in sheets and in combination with textiles, metals, etc., \$27,000; tissues, spun asbestos, and mica, \$54,000, mainly from Germany. In the last-named category \$250 worth appears as from the United States, but it is believed that a portion of the shipments credited to Germany were of American origin. In the same year the Swiss exports amounted to \$80,000 worth of prepared asbestos and mica and \$190,000 worth of manufactures. There is an asbestos mine at Poschiavo, Canton Graubunden (Grisons), and asbestos is spun and worked by a firm at Ennenda, Canton Glarus.

Import prices per 100 kilos (220.46 pounds) average: Raw, \$11 gross weight; spun, \$19.30. Asbestos is considered a precarious article to handle by reason of fluctuation in quotations and the inability to hold to a price agreement.

ENGLAND.

[From Consul Horace Lee Washington, Liverpool.]

There is but one manufacturer in Liverpool who weaves asbestos fiber into cloth; the others merely put together the cloth sent to them already manufactured. It is difficult to arrive at the actual prices of asbestos, owing to the varied qualities, but an approximate range of prices would be from \$24.50 to \$87.50 per ton, according to the length of the staple.

Italian fiber is said by the trade to be in good demand in England by reason of the length of the staple, which exceeds that of other

imports. According to the statistics, the relatively small amount of 2,987 hundredweights imported from Italy in 1910 had a value of \$21,378, whereas the 19,593 hundredweights imported from the United States were worth but \$35,813. The imports into Liverpool of asbestos fiber from the United States in 1909 were 3,342 hundredweights, valued at \$2,705, and in 1910 they amounted to 79 hundredweights, valued at \$574.

Imports by Countries.

The imports from different countries into the United Kingdom in 1908, 1909, and 1910 were as follows:

Countries.	Quantity.			Value.		
	1908	1909	1910	1908	1909	1910
FOREIGN COUNTRIES.						
Russia.....	<i>Cwt.</i> 20,751	<i>Cwt.</i> 10,704	<i>Cwt.</i> 17,153	\$123,142	\$71,000	\$119,264
Germany.....	5,518	6,263	6,316	40,240	48,680	62,008
Portuguese East Africa.....	4,508	5,793	4,048	39,676	56,523	35,015
Italy.....	3,022	3,837	2,987	26,960	38,378	21,378
United States.....	21,107	27,653	19,593	42,148	40,547	35,813
Other foreign countries.....	2,666	2,977	1,461	17,339	12,413	7,085
BRITISH POSSESSIONS.						
Cape of Good Hope.....	4,857	7,573	13,347	17,388	30,517	53,908
Natal.....	467	1,396	1,003	4,666	9,246	7,000
Canada.....	67,147	48,702	77,621	194,685	144,685	210,864
Other British possessions.....	1,583	760	253	12,510	5,596	1,764
Total.....	131,716	115,658	144,382	518,754	457,635	554,279

[The names of weavers of asbestos fiber, manufacturers of asbestos products, and importers in various towns of the United Kingdom are on file in the Bureau of Manufactures.]

RUSSIA.

[From Consul General John H. Snodgrass, Moscow; see also Daily Consular and Trade Reports for Oct. 14, 1911.]

At present asbestos mining in Russia is conducted without any real organization, the operators not owning the mines, but renting the asbestos-bearing grounds from the Imperial Government on leases of long duration, with a stipulation for developing a certain part each year. The output is limited from lack of capital. The methods employed are antiquated, and little interest is manifested in introducing modern appliances.

The Ural district is easily worked on account of a sufficiency of labor. There are two mining schools in that section, whose graduates can be hired at ordinary salaries. For technical construction and engineering, foreigners are absolutely necessary. The low cost of operation is conducive to large profits, the wage of the laborers being reasonable and their maintenance not expensive.

Asbestos Production in the Urals.

According to the latest available information there are 21 asbestos mines operating in the Urals. Their total production in 1910 amounted to 12,203 short tons, as compared with 14,670 tons in 1909, and 13,050 tons in 1908.

Following are the annual Russian exports and imports of asbestos from 1908 to 1910, the quantities being given in short tons:

Classification.	1908		1909		1910	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
EXPORTS.						
Raw product.....	8,162	\$586,070	9,153	\$630,300	8,805	\$806,979
IMPORTS.						
Lumps.....	79	8,240			(¹)	259
Powder or fiber.....	126	12,390	198	29,140	88	10,300
Pasteboard.....	144	31,415	126	28,325	115	31,115
Yarns and manufactures.....	126	38,025	157	48,410	252	82,915

¹ Not stated.

ITALY.

[From Consul Frank Deedmeyer, Leghorn.]

There are no manufacturers of asbestos products nor any users of asbestos fiber in manufacturing in the Leghorn consular district. There are, however, several firms selling asbestos at wholesale and retail, and their names are obtainable from the Bureau of Manufactures. The trade in this product is rather limited in the Leghorn district, and it is generally supplied from the asbestos mines in Savonia and the Italian Alps.

RHODESIA.

[From Consul Edwin N. Gunsaulus, Johannesburg, South Africa.]

The total declared output of asbestos in Southern Rhodesia from the beginning of operations in 1908 to January, 1912, amounted to 1,119.5 tons, valued at \$63,220, all of which was produced by the Rhodesian Asbestos Co. (Ltd.). The mine is situated in the Victoria district. It is stated by the Department of Mines and Works, at Salisbury, that with increased transport facilities a production of 150 tons per month may be maintained.

The valuation given to asbestos is assessed, the Department of Mines and Works not being in possession of the account of sales. The basis of valuation is as follows per ton: No. 1 grade, \$194.66; No. 2 grade, \$133.82; No. 3 grade, \$85.16; No. 4 grade, \$48.66.

Work was temporarily suspended on this mine on September 30 last, but will probably be resumed shortly.

CANADA.

A bulletin on the production of asbestos in 1910, issued by the United States Geological Survey, thus reviews the Canadian situation:

One of the most notable features in the asbestos industry of Canada for 1910 was a greatly increased production during the first seven months. This stimulation of trade is regarded as a consequence of the combination of a number of mines at Thetford and Black Lake to form the Amalgamated Asbestos Corporation (capitalization \$25,000,000) and the Black Lake Consolidated Co. (capitalization \$5,000,000). The combinations promised greater economy and efficiency of administration with wider publicity and extended utility to increase demand. However, as the demand did not increase as rapidly as the output there was an overproduction and prices declined. Many of the mines have had to shut down altogether and all of the others have curtailed

their production; but judging from the history of the industry, it is believed that a steady development will soon follow.

Canada is by far the largest producer of asbestos in the world, yielding, if that held in storage is counted, about 78 per cent of the total output in 1910. Its production is of especial interest to the United States, as most of the asbestos mined in Canada is exported to the States and forms the basis of a large asbestos manufacturing industry. Furthermore, a number of the most important asbestos mines in Canada are owned or controlled by American capital.

The preliminary report of the Director of Mines gives the Canadian production for the calendar year 1910 as: Asbestos, 75,678 short tons, value \$2,458,929; asbestic, 24,707 short tons, value \$17,629.

The Asbestos Merger.

Relative to the merger referred to above, the Toronto Monetary Times states:

Bonds of the Amalgamated Asbestos Corporation deposited with the National Trust as representatives of the Canadian committee now amount to some \$1,200,000, or about \$200,000 more than at the beginning of the year. The National Trust is hearing daily from large and small bondholders who desire to cooperate with the protective committee, and the outlook continues favorable that the necessary 75 per cent of the total issue of \$8,000,000 will be turned over to the representatives of the committees here, in Great Britain, and in the United States.

The published plan of the committee appointed to submit a scheme of reorganization includes the formation of a new company with the following capitalization: \$5,000,000 in first-mortgage, 30-year, sinking-fund, 5 per cent bonds; \$4,000,000 in 6 per cent participating preferred stock; and \$2,875,000 in common stock. The bonds of the old company are exchangeable at a fixed ratio for the new issues, and it is to this exchange that the Toronto paper refers.

[For an article on asbestos mines and mining in the Province of Quebec, transmitted by Consul Gebhard Willrich, see Consular and Trade Reports dated Apr. 23, 1910.]

ASBESTOS TRADE OF THE UNITED STATES.

The United States purchases practically all of its asbestos from Canada, the Dominion supplying 56,950 tons in the fiscal year 1911, and Germany, Russia, and Italy together only 174 tons. These imports had a value of \$1,294,802 and \$23,737, respectively. This country bought from abroad asbestos manufactures amounting to \$293,651 in 1911, of which \$133,113 came from the United Kingdom, \$72,192 from Germany, \$64,290 from Austria-Hungary, and \$15,019 from Belgium. In the same fiscal year the United States exported raw asbestos (ore and unmanufactured) worth \$16,151, mostly to Europe, and manufactures of asbestos valued at \$388,833. Of the latter Canada took \$171,582 worth, Cuba \$45,116, United Kingdom, \$37,140, Mexico \$34,904, and Germany \$27,284.

A review of asbestos production and trade in the United States was published in Daily Consular and Trade Reports for December 20, 1910. Supplementary statistics supplied by the Geological Survey give the total production of asbestos in the United States for 1910 as 3,693 tons, valued at \$68,357.

Consul Thomas W. Voetter, of La Guaira, says that the maximum size of the widest tires used in Venezuela on carts, the usual conveyance, is 2½ by ¾ inches. The maximum dimensions of the thickest tires are 1½ by ½ inches. The tires are made by local blacksmiths.

GERMAN STEAMSHIP COMPANIES PROSPEROUS.

[From Consul General Robert P. Skinner, Hamburg; see also Daily Consular and Trade Reports for Mar. 22.]

In closing their business year in the latter part of March, 1912, the Hamburg-American Line declared a 9 per cent dividend, the Hamburg-South American Steamship Co. a 10 per cent dividend, and the Kosmos Steamship Co. one of 12 per cent. The two latter companies are engaged exclusively in trade with South and Central America and the west coast of North America. The report of the Hamburg-American Line is in part as follows:

The insecurity and unrest of the general economic situation in the United States is evidenced by the considerable decrease in immigration compared with the preceding year. The large cotton crop helped somewhat to bolster up economic conditions. Boston, Philadelphia, Baltimore, and the Gulf ports participated prominently in the activity of the freight traffic. New Orleans, with her poor harbor facilities, has not for years kept pace with the steadily increasing traffic. The business with Canada showed a satisfactory increase.

An increase in the price of coffee gave greater purchasing power to the coffee-producing countries of the West Indies, although the crop proved but an average one, and the outbound traffic to these countries increased, while the homeward-bound traffic failed to advance.

The connecting routes between the Atlantic and Pacific Oceans, via Colon, Puerto Barrios, and the Tehuantepec line, showed progressive development. The traffic by the last-named route showed the greatest increase.

The Atlas Line experienced an important change. With the expiration, at the close of 1911, of our contract with the United Fruit Co., under which we have for the past 10 years forwarded large quantities of bananas from the West Indies to New York in specially arranged steamers, no understanding was reached as to its renewal. Consequently we have entered into a contract with the new Atlantic Fruit Co. for the same kind of shipping. The new company intends to ship bananas to Hamburg and other European ports in connection with the Hamburg-Colombian Banana Co. (Ltd.). We have secured a certain influence in the affairs of the latter company through the acquisition of a number of bonds issued by the Atlantic Fruit Co.

The service of our Hamburg-South American lines was hampered by the insufficient harbor facilities in many of the South American ports. While the accommodations at Para and Santos are almost sufficient, in the majority of the other ports the means for loading and discharging cargo for seagoing vessels are far behind the requirements of the increasing traffic.

A slight improvement was noticed during the past year in the business of the New York-Brazil line, which was heretofore operated with unsatisfactory results. Economic conditions in the countries on the west coast of South America, especially Chile, improved during the year, and we are satisfied with the results of the transactions which we carried out jointly with the Kosmos Line.

Report of Hamburg-South American Steamship Co.

The Hamburg-South American Steamship Co., devoting itself exclusively to the South American trade, reports as follows:

Exports to the east coast of South America were important during 1911, with the exception of northern Brazil. Freight rates were satisfactorily maintained, owing to the increasing freight markets. These have reached a height unknown for many years, and the prospects for the coming year permit us to expect their continuation. Owing to poor harbor facilities, we have been forced to make many additions to the charges for handling freight to protect ourselves somewhat against the heavy expenses and loss of time connected therewith.

The business for return voyages was not very good. The last crop in Argentina was below the preceding one. The vessels in our Argentine and Brazilian service frequently had to return in ballast, seldom being able to procure full cargo. The exports of tobacco and coffee from Brazil to Hamburg showed a further decrease; and the importation into Hamburg of india rubber from the Amazon region has not increased in the past 10 years. The Patagonia Coast Line, in which six steamers are employed, showed a good traffic return.

The east coast of South America seems to have a great attraction for competitors, as new ones enter the field every year, disappearing as suddenly as they come. We are unable to clearly understand why shipping companies should at this time, when

the open market and the charter business promise such excellent returns, endeavor to force themselves into competition from which only loss can result and try to enter the business of the lines maintaining regular service. We can only explain these proceedings by crediting them to an insufficient knowledge of conditions prevailing in the Brazilian trade, which makes the freight rates quoted to that country appear more favorable than they actually are, on account of the high cost of maintenance, lack of return cargo, and poor harbor facilities, which cause a great loss of time.

In November, 1911, our new passenger steamer, the *Cap Finisterre*, the largest ship which has ever plied between Europe and South America, made her maiden trip. We have ordered another large passenger steamship, to be delivered in the fall of next year, and in April of this year the Diesel motor ship which we ordered last year will be put into commission. This is the first large German motor ship for trans-Atlantic trade. The two large twin-screw 12,000-ton freight and emigrant ships and a freight steamer of about 7,000 tons, which were ordered last year, will make their first trips at an early date. In addition we ordered two other twin-screw 12,000-ton freight and emigrant ships some time ago, which will be completed at the beginning of next year. Our fleet has thus been increased by about 67,000 gross registered tons, reaching a total of about 285,000 gross registered tons.

Kosmos Line's Review.

The Kosmos Steamship Co. is particularly interested in the west-coast trade to points as far north as Puget Sound, and reports as follows:

Our outward-bound business shows a considerable increase, through carrying material for railways and for the erection of nitrate works. Exports of general merchandise did not increase perceptibly. During the latter months exports to Chile showed an increase on account of the projected increase in the tariff.

The general economic condition of Chile was favorably influenced during the year by the better condition of the nitrate industry as well as by activity in construction work. The exports of nitrate from Chile during 1911 amounted to 2,400,000 tons, of which 1,800,000 were shipped to Europe. The importations into Hamburg amounted to 790,000 tons, of which 330,000 tons were carried by our line.

Iron ore from the Province of Coquimbo is a new product for export to Europe. As this ore contains a large percentage of iron, it is expected that with moderate freight rates the business will be satisfactorily developed.

Our outward-bound traffic to California and British Columbia showed a decrease, owing to the fact that some lines have already opened communication with this section in conjunction with service via the Panama Canal. We are unable at present to clearly foresee what changes will be necessary in our line as a result of the opening of the canal.

[From Consul William T. Fee, Bremen.]

North German Lloyd Report.

The annual report of the North German Lloyd Steamship Co. for the calendar year 1911 shows that during that year it carried 158,804 passengers to the United States, against 219,763 in 1910. The number of persons carried from the United States to European ports rose from 90,692 in 1910 to 93,338 in 1911. The loss in the west-bound passenger traffic is almost entirely accounted for by the decrease in emigration, said to be due to the weak labor market in the United States. The sharp quarantine measures necessitated by the spread of diseases in southern Europe no doubt also exerted a retarding influence.

The freight traffic of the company is reported as highly satisfactory, the increased demand having in many instances necessitated the chartering of extra steamers. The present fleet of the company consists of 119 ocean-going steamers, of a total of 665,350 register tons, and 325 smaller vessels, including river steamers, coasting vessels, 2 school-ships, and 6 steamers under construction. The total profits for the year shown by the report were about \$9,877,000, an increase of \$809,200 over the preceding year.

COTTON GROWING IN THE DOMINICAN REPUBLIC.

[From Consul Charles M. Hathaway, Jr., Puerto Plata.]

During 1911 many Americans visited this consular district to investigate the possibilities of cotton growing. Several of these have established themselves here and others are contemplating doing so. The result of these visits, some of them by cotton experts, has been a closer examination of the situation than had before been made and the accumulation of a greater quantity of reliable data than was available to earlier reporters.

The present opinion is that there are good soil and climate here for cotton growing and that the outlook is promising, especially for the skilled and intelligent grower of pure sea-island cotton. The actual possibilities of sea-island and long-fiber upland cotton here are yet to be ascertained, as little skill has hitherto been brought to bear on their cultivation. There is hope that positive results may be reached during the present year on plantations where more scientific treatment is being given to the crop. The total cotton export from the Dominican Republic has risen steadily from 15,462 pounds in 1908 to 343,262 pounds in 1911.

The cotton-growing district of this Republic is the northern half of the island, principally the Provinces of Monte Christi, Santiago, and Puerto Plata. There has been some planting in the interior Provinces of Espaillat and La Vega, but reports from these last seem less encouraging. The Province of Pacificador, although not much planted as yet, is thought to contain much good cotton land. In Monte Christi irrigation will be needed, as the average rainfall is scarcely sufficient to mature the plant. In Santiago and Puerto Plata rainfall is more abundant, there being some fear there that it is too abundant for cotton, but with good drainage it is not thought that the crop will be endangered.

Cost of Plantations—Prices Received.

The methods of culture in use have hitherto been very primitive, but profitable cotton growing will require capital. One observer here places the minimum size of a cotton farm at 100 acres and the minimum capital at \$2,500 to \$4,000. Another regards \$12,000 as the smallest amount for undertaking the cultivation of 100 acres. The cost of clearing, plowing, stumping, planting (including the cost of good seed), cultivating, insect warfare, ginning, baling, etc., is placed at \$45 per acre, varying with different tracts. To this should be added cost of land, buildings, tools, and all overhead expenses. Suitable land can be bought in Monte Christi, it is said, for \$3 to \$6 an acre, which will cost \$8 to \$15 an acre to clear.

Labor is now obtainable at 50 cents per day, but tends to rise. Only unremitting superintendence can obtain the prompt and continuous attention of the laborers to the details necessary for successful cotton raising. Some of the larger enterprises, like the sugar estates, resort to importation of labor from the British West Indies and from Haiti, but this practice is now subject to some Government restriction.

It is thought that the best of the present Dominican output, if properly handled, would grade up to Egyptian, but with the system of ginning it has been graded with upland cotton and priced accordingly. A shipment from Monte Christi to New York in the early fall of 1911 failed to realize 14 cents, although, if properly ginned, this

cotton should have brought 23 cents. The average invoice price of the cotton shipped from Monte Christi in 1911 was 17½ cents. Shipments from Puerto Plata have realized 18 cents and upward in the English market. Sea-island cotton grown in St. Vincent in 1911 averaged over 38 cents, in Antigua over 34 cents, and similar prices in other British islands. Competent observers see no reason why proper methods of cultivation should not yield 1,300 to 1,800 pounds of seed cotton per acre. The cotton future of the island seems to be in sea-island cotton. It is thought that with proper treatment and roller ginning such cotton would bring a market price of 30 cents or more.

Market for American Goods.

The various supplies required for the development of cotton plantations offer an opportunity for the sale of American goods. Gins and their attachments, baling machines, traction engines, plows, cultivators, other agricultural implements, pumps and irrigation appliances, and high-grade seed will all be needed, besides the various personal requirements of American settlers. Americans have the advantage, as this country has better communication with New York than with any other port, and because the United States, as the leading cotton producer of the world, is the natural source of supply.

[The complete 32-page report, of which the foregoing is a condensation, giving complete details of cotton growing in the Dominican Republic, will be loaned in rotation to those interested on application to the Bureau of Manufactures.]

VACUUM CLEANERS IN FRANCE.

[From Consul James E. Dunning, Havre.]

There will eventually be a fairly good market for vacuum cleaners in France. The trade will have to be educated and the way carefully prepared by advertising, circularization, personal representation, and demonstration. France is a good country for window demonstration, and responds very well to personal canvass.

A good demand for some such machine is afforded by the fact that the household cleaning in France is done by an extra servant. On this basis an appeal could be made to the French sense of household economy. This could be made use of in advertising. Account would have to be taken of the first cost of the machine and of the very great difference in domestic procedure between France and the United States. The French are just beginning to take up the use of high-grade kitchen and other household appliances which are considered necessities by every family in America. The French will not take up an article because it is new and interesting, or because it is useful and a saving of physical effort; but because it can be shown to produce better results at a lower cost and under more healthful conditions.

National Fertilizer Convention.

The nineteenth annual convention of the National Fertilizer Association will be held in Atlantic City, N. J., July 16 to 19, 1912. There will also be an extensive exhibit of appliances for the fertilizer trade at the same time. W. W. Hubbard, Chestertown, Md., is president, and W. G. Sadler, Nashville, Tenn., secretary, of the association.

RUSSIAN CAVIAR INDUSTRY.

[From Consul John H. Grout, Odessa.]

Black caviar is prepared at Astrakhan from the bieluga (white sturgeon) and the sevriuga (stellated sturgeon).

Fresh caviar is of a light color and is contained in a membrane. The caviar is cut out and placed on an iron sieve, through which it is rubbed carefully, without breaking the grain, to rid it of any refuse. It falls into a preparation of brine, and after remaining there for three or four hours is emptied into a sack, where the brine gradually drains off, leaving the caviar ready for consumption. For local consumption, or when it can be kept continually on ice for a few days, the slight salting is dispensed with.

Preparation of Salted Caviar.

Salted (payousnaya) caviar is prepared in the same way as fresh except that the brine is stronger and the caviar remains one day in the sack to drain, after which it is pressed to get rid of the brine. For the production of good caviar, the brine must be boiled and cooled. The brine is made lighter in cold weather and stronger in hot weather.

Red caviar (tarama) is produced from the fish "taran" (*Cyprinus vimba*), which in Astrakhan is called "vobla." The roe is cut out and thrown into a preparation of brine made of 9 pounds of salt and 12 drams of saltpeter to each 36 pounds of water. It is then carefully mixed and all the refuse cleaned off, when it is ready for packing in barrels. The barrels are loosely hooped for two or three days, to allow the brine to drain off. For about a month this caviar is soft, but it gradually becomes solid. For good results, cold weather is required and the roe must be taken out of the fish the day it is caught or it is liable to become putrid. This caviar is more perishable than the black.

Whole-roe red caviar is prepared from the fish "soudak" (sandre). It is strongly salted and carefully packed to keep it whole.

[From Vice Consul Emerito Matilevich, Batum.]

Prices of Sturgeon Caviar.

There is no regular market for caviar in the Batum consular district. As far as can be ascertained, no difference is made in the prices of caviar obtained from the bieluga, the sevriuga, or other varieties. The wholesale prices of payousnaya (malossol) caviar at Astrakhan are 100 to 140 rubles per pood (\$1.43 to \$2 per pound) for first quality, and 60 to 80 rubles per pood (\$0.86 to \$1.14 per pound) for the second grade, in barrels and sacks. The difference in price depends on the preparation given by different producers. Fresh caviar, unsalted, brings 90 to 100 rubles per pood (\$1.28 to \$1.43 per pound) at Astrakhan. No fluctuation in price has taken place during the present season.

[From Consul John F. Jewell, Vladivostok, Siberia.]

Salmon Caviar, European and Asiatic Russia.

According to local newspapers, the market in European Russia for salmon caviar is strong. The price at Nikolaiefsk is 10 to 11 rubles per pood (\$14.26 to \$15.69 per 100 pounds), and in European

Russia 24 rubles per pood (\$34.22 per 100 pounds), the freight rate being about \$6.40 for 100 pounds. The Nikolaiefsk fishermen have petitioned for the erection of proper cold-storage facilities in European Russia and the Far East in order to equalize the market.

[From Consul Talbot J. Albert, Brunswick, Germany.]

Preservatives in Russian Caviar.

The German police authorities have called the attention of dealers to the fact that caviar imported from Russia has occasionally been found to have been treated with formaldehyde or boracic acid. As these preservatives are injurious to health, caviar so treated is forbidden to be sold, under the penalties of the pure-food law, and dealers in caviar are warned to contract that all caviar to be delivered from the catch of the present season should be free from such preservatives.

These preservatives have been found in the inferior qualities of caviar. Although the quantities have been small and possibly not sufficient to injure health, the leading merchants are careful not to handle caviar preserved in this way. The roe of the sturgeon should be conserved only with pure salt. There is no caviar that is not salted, but the dearer kinds contain less salt than the cheaper. One of the best varieties is called "malossol," which means in Russian "little salt." As malossol does not keep well, it is put up in tin boxes and kept in cold storage. In the best caviar, half to three-quarters of a pound of salt is added to 34 pounds of caviar. Generally this quantity of caviar is treated with 1 to 3 pounds of salt. Bieluga is considered the best variety of caviar.

As the sturgeon roe is always gray, falsifying of caviar seldom happens. Lately Swedish and Siberian salmon roe has been introduced in commerce, but this is easily distinguished by its red color.

Caviar is used frequently by the sick for nourishment, and the purity of the article is carefully guarded in Germany.

SICILY'S TUNNY FISHERIES.

[From Consul Hernando de Soto, Palermo, Italy.]

The tunny fisheries of Sicily, some 40 in number, are located along the northern coast of the island from Trapani to Messina. The fish are caught in May and June, and the quantity canned annually varies from 15,000 to 40,000 boxes of 80 kilos (kilo = 2.2046 pounds) each. The tins used hold from one-fourth kilo to 20 kilos.

From the refuse of the canneries about 10,000 kilos of tunny oil are extracted, the average price for the oil being 50 lire (\$9.65) per 100 kilos. This is shipped to Genoa, whence it is sold to firms in northern Italy or exported to foreign countries for use in the manufacture of chemical products. To extract the oil the refuse is boiled 24 to 48 hours and then passed through metal presses similar to those used in olive-oil establishments. The presses are of Italian make.

The pressed-fish residue is called "bagamo," and the entire output, which is estimated at 400 tons a year, is used in Sicily as a fertilizer, the average cost per 100 kilos being 6 lire (\$1.15).

DEVELOPMENT OF AUSTRALIAN TRADE.

[Prepared at Bureau of Manufactures from Australian official publications and from declared export returns of American consuls.]

The marked growth which has characterized the Australian trade since the inauguration of the Commonwealth on January 1, 1901, continued during last year.

A preliminary statement issued by the trade commissioner gives the total value of the oversea commerce last year as \$712,185,650, against \$654,571,021 for 1910, \$557,129,938 for 1906, and \$448,351,536 for 1901. The imports were valued at \$325,375,665 (merchandise \$315,686,152 and specie and bullion \$9,689,513), against \$292,059,839 (merchandise \$285,577,856 and specie and bullion \$6,481,983) for 1910. The Australian exports last year amounted to \$386,809,985, of which \$328,115,952 represented merchandise, the remainder being gold. The exports in 1910 were valued at \$362,511,182, made up of \$339,953,606 worth of merchandise and \$22,557,576 in gold.

Imports into the Commonwealth.

The following table shows the value of the leading items of import into the Commonwealth during 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Ale and beer.....	\$2,111,249	\$2,311,309	Oil, kerosene.....	\$3,014,028	\$2,448,857
Apparel and dry goods...	68,634,058	73,032,802	Paints, colors, and var-		
Boots and shoes.....	1,755,171	1,861,417	nishes.....	2,342,685	2,361,542
Cordage and twines.....	3,119,807	3,538,725	Paper:		
Drugs and chemicals.....	4,449,319	4,542,538	Printing.....	3,558,396	3,533,342
Earthen and china ware..	1,697,820	2,160,654	Other.....	3,568,362	4,006,142
Fish.....	2,627,414	2,709,818	Railway materials (rails,		
Glass and glassware.....	2,028,124	2,512,277	etc.).....	3,993,825	5,303,142
Hats and caps.....	1,514,193	1,598,811	Rubber goods.....	3,320,885	4,404,183
Implements and machin-			Spirits:		
ery, agricultural, etc....	2,871,649	3,654,016	Brandy.....	746,580	1,172,637
Instruments, musical, pi-			Gin.....	675,636	774,582
anos.....	1,633,563	2,302,746	Whisky.....	2,916,557	3,210,460
Iron and steel:			Sugar (cane).....	1,979,249	1,966,596
Bar, blooms, girders,			Tea.....	5,995,849	6,073,767
etc.....	5,208,620	7,934,191	Timber.....	10,294,492	13,850,521
Galvanized, plate,			Tobacco:		
and sheet.....	8,380,682	8,668,656	Manufactured.....	781,132	817,120
Jewelry, and imitation....	1,383,468	1,662,494	Unmanufactured.....	2,163,819	2,473,209
Jute goods (bags, etc.)...	5,065,939	6,651,007	Cigars.....	592,964	850,971
Leather.....	1,893,770	1,856,244	Cigarettes.....	196,397	228,667
Machines and machinery			Tools.....	2,593,402	3,129,914
(except agricultural)....	14,569,810	17,805,540	Vehicles and parts (in-		
Manures.....	3,259,533	2,467,443	cluding cycles and mo-		
Metals, manufactures of...	18,013,706	21,240,842	tors).....	5,820,577	7,657,696

As will be seen from the foregoing table, practically all the items show an increase over 1910.

Increased Imports from United States.

The statistics showing the trade by countries will not be available for some months, and therefore there is no way of ascertaining to what extent the United States benefited by the increase in the Australian imports during last year. There has been a gradual gain, however, in the imports of American goods. In 1906 they amounted to \$27,279,711, but in 1910 had increased to \$37,273,254. These American imports cover all kinds of merchandise, the principal of which during 1910 were undressed timber, amounting to over \$4,000,000; followed by kerosene oil, valued at \$2,800,000; raw tobacco, \$2,050,000; rails, fishplates, etc., \$1,800,000; leather, \$1,180,000;

tools, \$1,046,000; manufactured tobacco, \$712,000; cotton and linen piece goods, \$652,000; preserved fish, \$805,000; iron and steel wire, \$875,000; printing paper, \$540,000; and arms and ammunition, \$456,000.

Exports of Principal Products.

The leading Australian exports and their value during 1910 and 1911 were as follows:

Articles.	1910	1911	Articles.	1910	1911
Animals—horses.....	\$1,246,330	\$1,070,187	Rabbits and hares:		
Butter.....	19,236,840	22,568,258	Preserved.....	\$3,046,395	\$3,785,169
Coal.....	4,428,822	4,415,147	Other.....	2,368,000	1,980,827
Copper, ingots and matte.	10,334,776	11,085,639	Silver, bar, etc.....	2,666,461	2,405,246
Fruits, fresh.....	1,570,380	1,563,471	Skins:		
Flour.....	6,054,729	6,775,380	Rabbit.....	2,763,910	2,430,112
Hides.....	2,219,343	2,975,223	Sheep.....	9,824,948	7,849,665
Lead.....	5,153,215	5,394,086	Other.....	4,415,731	2,445,713
Leather.....	2,584,784	2,351,576	Tallow.....	9,201,904	9,434,440
Meats, frozen:			Timber.....	4,918,075	5,217,331
Beef.....	5,738,315	5,363,825	Tin, ingots.....	3,288,956	3,723,744
Mutton and lamb.....	10,519,004	7,932,323	Wheat.....	48,341,671	46,831,021
Oil, coconut.....	935,074	881,007	Wine.....	627,452	738,502
Ores (exclusive of gold)...	4,117,774	5,180,769	Wool.....	140,044,648	126,959,870
Pearl shell.....	1,567,908	1,524,943			

Although wheat decreased in value of shipments compared with 1910, the quantity exported increased, being 28,657,137 and 32,992,173 centals (cental=100 pounds, avoirdupois) for 1910 and 1911, respectively. The wool shipments amounted to 650,985,361 pounds, a loss of 13,162,739 pounds; butter, 101,712,164 pounds, a gain of 13,784,013 pounds; flour, 3,544,099 centals, an increase of 745,181 centals.

Shipments to United States by Consular Districts.

According to invoices certified at the several American consulates and agencies throughout the Commonwealth there was a decrease in the total shipments to the United States compared with 1910. The articles invoiced last year were valued at \$10,272,330, a decline of \$631,558. The following table gives the total value of the shipments from each district for two years:

Consular districts.	1910	1911	Consular districts.	1910	1911
Hobart, Tasmania.....	\$79,231	\$170,438	Melbourne, Victoria.....	\$2,463,778	\$2,563,306
Newcastle, New South Wales.....	540,413	466,003	Adelaide, South Australia.....	99,466	47,162
Brisbane, Queensland.....	1,009,040	797,010	Freemantle, Western Australia.....	425,729	325,423
Townsville, Queensland.....	216,291	425,206	Sydney, New South Wales.....	6,096,482	5,622,110

As seen from the foregoing table, the exports from Tasmania increased considerably, due to shipments of apples amounting to \$56,713, while there were none invoiced in 1910. Another item contributing to the increase was timber, which shows a gain of \$53,192. The increase in the value of the shipments from Melbourne was due to the larger exports of wool, which totaled \$2,290,934 against \$2,068,587 in 1910. Frozen meats are practically the only items invoiced from Townsville to the United States, and these increased from \$128,555 in 1910 to \$198,989 in 1911.

Principal Australian Exports to United States.

The following were some of the principal items in the Australian shipments to the United States, as invoiced through the American consulates during the past two years:

Articles.	1910	1911	Articles.	1910	1911
Apples.....		\$56,713	Osmiridium.....	\$10,762	\$19,644
Beef and by-products.....	\$691,671	644,922	Pelts, pickled.....	145,181	105,025
Coal.....	533,136	465,928	Skins:		
Copper:			Calf.....	100,110	156,933
Blister.....	425,487	324,762	Marsupial.....	874,397	619,450
Other.....	3,411,085	3,372,849	Rabbit.....	320,882	353,567
Dairy products.....	81,434	81,387	Timber.....	59,327	145,922
Fusel oil.....		14,681	Tin.....	410,760	185,899
Hides.....	126,704	262,664	Wool.....	3,173,365	2,989,271
Hogs and by-products.....	81,672	102,165			

CHEWING GUM IN CHINA.

[From Consul General Samuel S. Knabenshew, Tientsin.]

Very little chewing gum is at present sold in China; at least, that is true of the north. None of the business houses in Tientsin carry it in stock. This is because there are comparatively few Americans in China, and foreigners of other nationalities are not particularly addicted to the chewing-gum habit. There are perhaps 3,000 foreigners, excluding soldiers, in the various concessions at Tientsin. About 120 of these are Americans. The Japanese come first in numbers and the British next; neither of these nationalities use chewing gum. Whether the Chinese would take kindly to it if it were introduced is a question that can be solved only by experiment.

The use of cigarettes in China is increasing rapidly among the natives, and it is possible that if the same methods were used to introduce chewing gum it would have a similar success. The British-American Tobacco Co. entered this field several years ago. With headquarters in Shanghai, it has established large houses in each of the treaty ports, from which traveling men are sent through the cities and towns of the interior, placarding the walls with huge illustrated posters printed in Chinese. These salesmen distribute sample packages of cigarettes on the streets, giving away many thousands as an advertisement, and then arrange with some native merchant to carry a stock of their goods. By these effective and energetic methods they have built up an enormous traffic which is steadily growing.

It is entirely possible that a similar campaign on behalf of chewing gum would have similar results. I doubt, however, if any business of importance can be built up by endeavoring to sell through the foreign import firms of Tientsin and other treaty ports, first, because there are very few American firms in China, and, second, because it would be practically impossible to induce merchants of other nationalities to take up the matter and push it in the energetic manner detailed above.

Naval Shipyards in Italy.

Consul General James A. Smith, of Genoa, states that Italy has 21 naval shipbuilding yards, with a total capital of about \$20,000,000 and nearly 16,000 workmen. A list of the yards may be had from the Bureau of Manufactures, Washington, D. C.

RUSSIAN BUSINESS NOTES.

(From Consul General John H. Snodgrass, Moscow.)

Siberian Railway Travel and Traffic.

The International Sleeping Car Co. seeks governmental permission for operating the Far Eastern Express (new train de luxe) to accommodate the many passengers over the Siberian route who formerly traveled via the Suez. Arrangements have been made to run the same train via Changchun and Mukden to Seoul, Shimonoseki and Tokyo, and to Tientsin, Peking, and Hankow; also on to Canton when railroad construction is finished thereto.

The Siberian Railway is handling increased traffic of food articles, which has overburdened the line, which with its single track can not handle over 40 trains daily.

Russia's Proposed Northern Waterway.

The Tomsk Chamber of Commerce, having ended the discussions of the propositions of the shipowners for connecting Siberian rivers with the Volga, decided that the solution of the difficulties in the absence of roads and means of communication in Siberia can be reached only by opening navigation over the northern sea route, which actual experience has proved possible for vessels. The committee asks the Government to establish docks and other landing points at the mouths of the Rivers Ob and Yenisey; to provide means of transportation; to construct wireless telegraphic stations; to organize a permanent anchoring station at the port on Nova Zembla, and to construct lighthouses. The Omsk Chamber of Commerce adopted a similar resolution.

New Moscow Loan for Improvements.

Although Moscow's municipal debt totals \$60,850,342, a new \$19,055,000 loan for city improvements will soon be floated in London at 4½ per cent, the bonds probably going on the market at 95. Interest and partial payment on the debt amounted to \$3,043,950 in 1910, representing 16.7 per cent of the city revenues. Notwithstanding the rapid increase of indebtedness, Moscow's credit is sound, the assets exceeding the liabilities by \$34,282,045. On January 1, 1911, municipal property, with unspent part of loans, aggregated \$94,772,582. The greater part of the loans are productive, being made principally for undertakings and property purchases. With the new loan profitable investments will reach \$77,616,976, or 97.2 per cent, while nonincome buildings represent only 2.8 per cent. Moscow compares favorably with other large European cities, as is shown by the following table of city loans:

Cities.	Date.	Productive expenditure.	Unproductive expenditure.	Total.
		<i>Per cent.</i>	<i>Per cent.</i>	
Moscow.....	Dec. 30, 1911	98.45	1.55	\$60,550,342
Petersburg.....	Jan. 1, 1910	75.8	24.2	48,101,000
Warsaw.....	Jan. 1, 1910	80.3	19.7	16,000,340
Odessa.....	Jan. 1, 1910	72.28	28	8,240,000
Riga.....	Jan. 1, 1910	85	15	7,188,134
London.....	Apr. 1, 1910	43.5	56.7	
Paris.....	Apr. 1, 1909	81.7		553,882,500
Vienna.....	Jan. 1, 1910	77.4	22.6	96,670,930

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 587. Navy Department supplies.**—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids for the following supplies, and firms interested should apply to the Bureau of Supplies and Accounts, giving the schedule number desired: (1) Until April 30, 1912, schedule 4472, white ash; schedule 4490, wood screws. (2) Until May 7, schedule 4490, strap coils, poplar excelsior, packing hay, garden hose, laundry soap, red brick, barrels, copper, flour; schedule 4481, squilgee rubber blades, rectangular mirrors, steel plow wire rope, steel and phosphor-bronze springs, cast-steel crucible wire, direct differential blocks and hoists, twist drills, scaling hammers, wrought-iron hammock rings, wrought-iron screw shackles; schedule 4473, single-conductor lead-sheathed cable, building sand, broken stone or gravel; schedule 4480, compressed slab cork, wooden fenders for towboats, Spanish-cane ship fenders, fire rubber hose, white-ash oars, wrought-iron or steel pipe, sheet lead; schedule 4491, coffee crates, coffee tins; schedule 4486, high-speed steel furnaces; schedule 4487, steam gauges, loofah sponges, turkish toweling, chain blocks, air hoists, pig iron; schedule 4483, lubricating graphite and greases; schedule 4477, wash metal, aluminum, ferromanganese, ferrosilicon, round bar iron; schedule 4475, black building paper, fire and silicate Paxson's clays, crushed rock, Albany sand, Lumberton sand, red gravel sand, Paxson's blast sand, silica sand, sawn spruce; schedule 4485, metallic life rafts; schedule 4484, automatic electric motor starters; schedule 4474, electric-driven winch; schedule 4489, Millville and core gravels, Albany sand, Lumberton sand, Crescent sand; schedule 4482, white ash, Port Orford cedar, clear fir, lignum-vita, white oak, yellow pine, plank spruce; schedule 4478, white pine, pig iron; schedule 4479, yellow pine; schedule 4488, phosphor copper, cast scrap iron; schedule 4480, solder; schedule 4469, drill rod steel, tungsten tool steel, carbon tool steel; schedule 4471, zinc boiler plates, slab zinc, rolled sheet zinc.
- No. 588. Photographic printing paper and cloth.**—Sealed proposals, in duplicate, will be received at the office of the Chief of Ordnance, United States Army, Washington, D. C., until 12 noon April 19, 1912, for furnishing during the fiscal year beginning July 1, 1912, such quantities of the following supplies as may be required: Photographic printing cloth (about 1,500 yards used per year); brown photographic printing paper (about 300 rolls used per year); blue-print paper (about 2,500 yards used per year).
- No. 589. Stone schoolhouse.**—Sealed proposals will be received at the Indian Office, Washington, D. C., until 2 p. m. May 14, 1912, for furnishing materials and labor for the erection of a stone schoolhouse at the Western Navajo Indian School, Ariz., in strict accordance with the plans, specifications, and instructions to bidders, which may be examined at the Indian Office, Washington, D. C.; the offices of the Supervisor of Construction, Denver, Colo.; the Builder and Contractor, Los Angeles, Cal.; the Arizona Gazette, Phoenix, Ariz.; the Morning Journal, Albuquerque, N. Mex.; the United States Indian warehouses at Chicago, Ill., St. Louis, Mo., Omaha, Nebr., and San Francisco, Cal.; the Builders and Traders' Exchange at Minneapolis, Minn.; and at the school. For further information apply to the Superintendent of the Western Navajo Indian School, Tuba, Ariz.
- No. 590. Sump pit, pump house, and machinery.**—Sealed proposals, in duplicate, will be received at the office of the Quartermaster's Department, Marine Corps, Washington, D. C., until 11 a. m. April 29, 1912, for the construction at the marine barracks, navy yard, Norfolk, Va., sump pit and pump house, including machinery. Plans and specifications may be obtained from the commanding officer of the marine barracks at Norfolk and at the Washington office.

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.



DAILY CONSULAR AND TRADE REPORTS

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15th Year

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COOPERATIVE SOCIETIES IN FRANCE.

[From Consul General Alphonse Gaulin, Marseille.]

The first cooperative store, or workmen's distributive society, in the Marseille consular district was founded at Nimes in 1878, by M. Faber, a retired manufacturer who had been in his youth a disciple of Fourier and a member of the Familistere at Guise. Another association was formed five years later in the same city by M. de Boyve, Charles Gide, the well-known economist, and a small group of workmen. In 1885, these two societies federated with a cooperative bakery, also of Nimes, and started a propaganda that resulted shortly afterwards in the formation of the Union Coopérative des Sociétés Françaises de Consommation, a national organization with headquarters at Paris. The movement spread to other cities and has been, on the whole, fairly successful, although the distributive branch of cooperation has not yet become a prominent factor in the economic development of the country.

Number of Cooperative Stores in Operation.

According to the Almanach de la Coopération Française for 1912, there were in 1911 in this district 240 cooperative stores and distributive associations, as compared with 105 in 1901 and 60 in 1893. They had 30,096 members, and their total business for the year 1910-11 was \$1,800,343. The per capita average of purchases of only about \$60 annually indicates that the societies supply only a small portion of the commodities required by their members and their families. The total membership of these associations represents about one-half of 1 per cent of the population of the district. The average number of members per society is 130.

Among these societies there are 104 cooperative bakeries, and several others that supply bread to their members in exchange for wheat. There are also 2 cooperative meat markets, 11 stores exclusively devoted to the wine trade, and 4 for the purchase and distribution of coal. The majority are, however, general cooperative stores dealing chiefly in groceries and only a few of these sell meat, which they seem to be unable to handle profitably.

In Marseille, which has a population of 551,000, the total number of cooperators does not exceed 2,000, and about 1,200 of these belong

to a semiprivate organization open only to certain classes of employees. Nîmes still leads in the cooperative movement in southern France. Its principal society had 658 members in 1911.

Organization of the Distributive Societies—Prices.

Most of the distributive societies in the district are modeled essentially on the Rochdale system. In many cases, however, membership is limited to persons engaged in the same trades or professions, and even to workmen employed in the same establishments. A number have associate members, who pay a small entrance fee and share the profits in proportion to their purchases, but have no voice in the management and no interest in the collective funds and property. The regular shareholders receive, besides their proportion of the net profits, 4 to 5 per cent on the amount of the paid-up capital. The value of the shares is usually fixed at 25 francs (\$4.83), only 10 per cent of which is required upon admission, the balance being payable from the profits.

Cash transactions are the rule, but credit is occasionally extended for amounts corresponding to the value of the shares held by the members concerned; also upon payment being guaranteed by fellow members. In certain societies a special fund is maintained for this purpose.

The prices of the cooperative stores are generally below those current in the locality. The surplus is divided twice a year. The semiprivate organization at Marseille, already referred to, does not at present undertake the sale of merchandise on its own account, but has arrangements with local dealers whereby its members obtain discounts ranging from 5 to 15 per cent on the prices charged to ordinary customers. These discounts, which apply to a great variety of articles, and to practically all of the common necessities, are collected monthly through the society, which retains a small commission for its running expenses and reserve fund. Other societies have made similar arrangements for special commodities. About 30 per cent of the societies sell to the public as well as to their members.

Use of Profits—Management—Effect on Cost of Living.

Many societies set aside part of their profits for educational and social purposes, such as mutual-benefit funds, employees' profit sharing, and loan funds for members in straitened circumstances. The Federation of Employees of the Paris-Lyon-Mediterranean Railway Co., which groups a large number of societies, maintains, in addition to a sickness and accident fund, a special fund for the widows and orphans of members.

The general management of cooperative stores is usually vested in committees or boards of directors, elected every 12 or 18 months by the shareholders. The members of the committee receive no compensation, but each society has a salaried business manager, chosen either by the shareholders or the committee and acting under the direction of the latter. The accounts are audited at certain intervals by special committees. It appears that societies in this district experience considerable difficulty in obtaining competent business managers, owing partly to a general unwillingness or inability to pay adequate salaries. The prevailing tendency to create small societies instead of building up large and powerful associations is also an unfavorable factor in this respect. On the other hand, the low rate of interest paid on the capital invested in these societies, their practical exemption from advertising charges, their relatively inexpensive

quarters, which are generally located on side streets, the purchasing facilities and advantages granted by the trading unions and federations, allow them to compete on more than equal terms with the average retailer.

Taking into account the dividends distributed to the purchasers, it is estimated that the members of cooperative societies in the district obtain their domestic supplies, which are invariably of standard quality, at prices 10 to 12 per cent lower than those paid by the ordinary consumer. Moreover, in many localities these societies exert a steadying influence on the retail market, thus rendering a valuable public service. While the opposition of the middlemen, whose trade these societies curtail, has manifested itself in various efforts to secure adverse legislation, it can not be said that there exists in this district much hostility to the cooperative movement. Certain societies have even contracted with retailers for the sale of various articles to their members.

Local and National Union.

Nearly all the distributive societies in this district are federated into local and national unions. The majority are affiliated with the Union Coopérative des Sociétés Françaises de Consommation, which centralizes the interests of the societies and attends to the educational side and general organization of the movement. The same societies are shareholders and members of the Coopérative de Gros, or Wholesale Cooperative Society, which is an annex of the above-mentioned Union Coopérative and exists merely for trading purposes. The Coopérative de Gros is modeled on the Cooperative Wholesale Society (Ltd.), of England, but it disposes of only a small turnover and has not yet reached the manufacturing stage. It deals directly with the producers and sells to the affiliated societies practically at cost price. It maintains warehouses in various cities, including Marseille, and also sends goods on consignment to the societies. The net profits are returned to the societies. No interest is paid on the first share of stock held by each member, but 5 per cent is paid on all others. The affiliated societies receive most of their supplies from this source, but they also do a considerable amount of business directly with the manufacturers, wholesalers, and agricultural productive associations.

The Fédération des Coopératives du P. L. M., at Grenoble, the Fédération Méridionale des Sociétés Coopératives de Consommation, at Marseille, and the Fédération des Sociétés Coopératives du Gard et de l'Hérault, at Nîmes, have grouped a large number of societies, but these trading federations do not, as a rule, buy for their own account, being chiefly cooperative purchasing agencies, collecting and forwarding orders to reliable concerns.

Agricultural Cooperation.

The agricultural syndicates play the most important part in the cooperative movement of the country. The principal object of these syndicates is the collective buying of fertilizers and other farm materials. They are not supposed to engage in trade, except to transmit the orders of their members, but in actual practice they frequently make direct purchases and sales. A number of distributive societies have been formed for this purpose and are conducted by the syndicates, which have also organized cooperative societies for the handling and marketing of agricultural products.

From the first agricultural syndicates formed in this consular district in 1885, the number has increased to over 450, with a total membership of about 160,000, doing a business of several million dollars a year. Membership is open to all agriculturalists in the territory covered by the association upon payment of a small entrance fee and annual dues. The societies are managed by elected committees, the most important employing salaried secretaries. Sales are made at cost price, plus a commission of 1 to 3 per cent for running expenses and provident purposes. Profits are not distributed, but are frequently applied to the purchase of expensive machinery for collective use.

Most of the syndicates are federated into district unions, which are in turn connected with the national unions. The principal federation in southern France is the Union des Alpes et Provence, established at Marseille in 1893, and comprising 325 syndicates. A large number of syndicates in the Ardeche and Drome Departments are affiliated with the Union du Sud-Est, of Lyon. The syndicates of the Aude, Herault, and eastern Pyrenees belong generally to the Union du Midi, of Toulouse. There are also a few local unions and a number of independent syndicates. The syndicates usually collect and send the orders of their members to the unions, which deal directly and enter into important contracts with the producers. The unions and syndicates maintain warehouses, but in many cases the goods are shipped by the manufacturers to the consumers individually and charged against them. The commission charged by the unions for their services rarely exceeds 2 per cent, and is generally 1 to 1½ per cent. The surplus is divided annually among the syndicates in proportion to their purchases. The syndicates pay to the unions annual dues averaging 2 cents per member. The unions are managed on the same lines as the syndicates, only the general secretary and employees being salaried. The independent syndicates buy their supplies chiefly from the agents and representatives of the manufacturers.

Results Accomplished by Agricultural Syndicates.

It is claimed that the agricultural syndicates have brought about reductions of 30 to 40 per cent in the prices of fertilizers, besides checking fraud and compelling the delivery of pure products. They have also secured materially lower prices in other lines, chiefly for the benefit of the small farmer. By employing a portion of their profits in the purchase of machinery that comparatively few French peasants can afford to buy, and renting this machinery at a nominal charge, or even loaning it gratuitously to their members, the syndicates have also aided in lowering the cost of production in many agricultural communities.

The first association in this district organized for productive cooperation was formed by several syndicates for the protection of the local caper-growing industry against the active and dangerous competition of the more cheaply produced and inferior Algerian and Spanish products then frequently mixed with domestic capers and sold as Provence products. The success of this venture led to the organization of a similar society among the apricot growers of Roquevaire and Lascours. This society inaugurated the preparation and sale in common of apricot pulp, an industry which has flourished ever since in these two localities.

The almond growers of Codoux, in the Department of Bouches-du-Rhone, the horticulturists of Hyeres, Toulon, and Ollioules, and the strawberry growers of the Department of Vaucluse have also formed cooperative selling associations, which have proved most useful and profitable to their members. The nurserymen of Vaucluse have a special organization through which they purchase their supplies and sell their products, and which exercises general control over the plantations of the members. A prosperous cooperative creamery treating about 1,100 quarts of milk a day has been in operation at Allos since 1907. Its annual butter output averages 31,000 pounds, and it also produces cheese of the Camembert type. About 100 farmers are members of the controlling association, which started with a capital of \$6,000, including a State loan of \$2,000 and a \$400 subvention from the town.

Cooperative Movement Among the Olive Growers.

The greatest progress of the cooperative movement has been made among the olive and wine growers. In 1900 a group of olive growers in Codoux formed a syndicate for crushing their crops in common and securing for themselves the profits that went, under the existing system, almost entirely to the local millers. The results were very satisfactory and their example was soon followed in other towns, some associations being formed solely for industrial purposes, but the majority for the manufacture and commercial distribution of the oil. There are at present 21 of these associations in southern France, the most important in this district being the Société Coopérative de Défense Agricole and the Coopérative de Productions Agricoles, La Travailleuse, both of Cotignac. These two societies were formed in 1905, and their combined oil output is 55,000 to 110,000 pounds per season.

The French Government has given considerable aid and encouragement to this movement. The experts and officers of the Service Oleicole of the Department of Agriculture have not only promoted the formation of these associations, but have lent technical assistance of the greatest value. The State has also extended financial assistance by granting subventions and fiscal immunities, and particularly by long-term loans through the agricultural credit associations. These loans, which must be employed for the purchase or erection of suitable buildings and machinery, are usually granted for a period of 25 years, and may be equal to double the paid-up capital of the society. The rate of interest never exceeds 2 per cent and is generally $1\frac{1}{2}$ per cent. In 1910, 11 societies secured loans of 4,000 to 45,000 francs (\$772 to \$8,685) and aggregating 170,000 francs (\$32,810).

Methods and Management of Olive Growers' Societies.

The olive growers' cooperative societies have, on an average, 100 members each, whose individual crops vary from 50 to 180 bushels of olives. The capital stock is divided into shares of 25 francs (\$4.83). These societies are organized and managed in the same manner as the distributive associations. Several societies have erected model mills and others have rented and adapted old mills to present requirements. The outlay necessary for the proper equipment and operation of a small olive mill varies from \$4,500 to \$6,000, divided as follows: Buildings, \$2,400 to \$3,000; machinery, \$1,600 to \$2,000; and general initial operating expenses, \$600 to \$1,000. The members receive

one-third to one-half of the value of their crops upon delivery to the cooperative mill, and the balance at the end of the season, when the profits are divided in proportion to the quantities furnished, after deducting the required amounts for the amortization of the State loans, the reserve fund, and the interest on the shares, which is usually fixed at 4 per cent. Some societies also maintain an insurance fund against sickness and accidents. It appears that the cost of manufacturing the olive oil is entirely paid by the by-products.

The oil is sold largely to wholesalers, but some business is done with the various cooperative stores and agricultural syndicates and there is an important retail trade, deliveries being made direct to consumers by parcel post. This retail trade entails various expenses, such as commissions and advertising, but the price received is 8 to 10 per cent higher than the wholesale rate. The oil produced by the cooperative societies is increasing in popularity, owing partly to the fact that it carries with it a guarantee of origin and purity.

Associations of Wine Growers.

The wine growers' associations, of which there are 26 in this consular district, are usually designated as "caves coopératives," or cooperative cellars. These societies, like those of the olive growers, were formed in the interests of small owners whose crops were generally handled in an unscientific and unsatisfactory manner, both from a productive and a distributive standpoint. Their principal aim is the production of wines for current consumption of standard quality and of greater merchantable value than the product of the average viticulturist. Certain cellars are used only for storing and treating the wines of the members, which the societies sell under the guaranties of their trade-marks. Other associations have been formed solely for the sale of table grapes, and there are also 10 cooperative distilleries and 5 societies which have been organized for both oil pressing and wine making.

The first cooperative cellar in this region was that of Les Vignerons Libres, which was founded at Maraussan in 1901 by a collectivist association of small wine growers and day laborers. It sells its entire production to the socialist cooperative stores. Cultivation in common is also practiced on a small scale by this society. The next cellar was established at Camps-les-Brignolles in 1906, while the latest is that of Besse. The growth of these societies is due largely to the law of December 29, 1906, authorizing the agricultural credit banks to grant long-term loans at a low rate of interest to associations of this character. The methods of organization and operation of the cooperative cellars do not differ materially from those adopted by the olive growers' associations. The grapes are graded according to the kind of wine for which they are used and separate accounts are kept for the different grades. The members are paid as soon as the bills are collected, but the society advances a portion of the value of the vintage whenever desired. A final settlement is effected at the end of each year.

The productive associations have improved the production of their members and increased their profits. A larger yield and superior quality of olive oil has been obtained. It can not be said that these societies have reduced the cost of living, but it is claimed that they offer better and purer products without advancing prices.

AUSTRALIAN SUGAR AND JAM INDUSTRIES.

[From Consul Henry D. Baker, Hobart, Tasmania.]

As Tasmania is the leading jam-producing State of the Australian Commonwealth, the evidence relating to the use of sugar, brought out during the sittings at Hobart of a royal commission appointed at the instance of the Parliament of Australia to inquire into the sugar trade of the Commonwealth, was of especial interest. The leading jam manufacturer of Australia, whose chief factories are at Hobart, stated that imported sugar is used for the foreign trade in jam, but only Australian sugar for the Australian trade.

There is a drawback of \$14.59 per ton on foreign sugar used to make jam for export from the Commonwealth; the import duty on jam is 4 cents a pound when importation is from countries other than the United Kingdom and 3 cents a pound on jam from the United Kingdom and certain other British territory. The duty on jam was stated to be of no real benefit to Australian jam manufacturers. This manufacturer estimated that a drawback of \$19.46 per ton on sugar made into jam for the Australian trade would give the jam manufacturers a fair profit and permit the raising of fruit prices 25 to 30 per cent. The jam manufacturers showed that the profits in their business were very small and depended on the doing of a large business, so that some of the small factories made practically no profit. According to the testimony offered, the cost of the fruit works out at 76 cents per dozen 2-pound cans, and the cost of manufacture at 74 cents per dozen.

The price of jam in Australia had been slightly raised on account of increased wages, it was said, and the prices per dozen cans were given as follows: Tasmanian trade, 1-pound tins 78 cents, 2-pound tins (in which there was a smaller trade) \$1.46; Australian trade, 1-pound tins 77 cents and 2-pound tins \$1.42. It was estimated that 60,000 tons of jam were consumed in Australia annually, and that the proportion of Australian jam to imported jam was about 1,000 tons of the former to every 72 pounds of the latter. Strawberry jam is about the only kind imported.

Capital Invested—Sugar Prices.

The amount of capital invested in the jam-making industry of Tasmania was stated by one manufacturer to be between \$625,000 and \$1,750,000. The same man said that the starting of a jam factory in Australia capable of competing with the existing companies would require an investment of \$500,000, and that it was not possible to start jam making and earn 6 per cent under present conditions. Competition is keen and Tasmanian jam is sold in Australia at as low a price as English jam in England. The leading firm had made contracts for periods of three to five years to encourage the fruit growers and had been exporting about 20,000 cases of jam a year to South Africa, where it controlled the bulk of the trade. But as sugar is about \$15 a ton lower in Africa than in Australia, and fruit can be obtained for half the Australian prices, this firm found that it would be to its advantage to give up the export business and build a factory in South Africa.

It was shown that all the Tasmanian jam makers buy their sugar of one firm at Sydney, which is the only refiner of sugar in the Commonwealth and controls practically the entire sugar trade of Aus-

tralia and New Zealand. Sugar for jam costs, delivered at the factory, \$98.65 per ton for 1A grade and IXD grade is \$1.22 per ton cheaper. The former costs \$88.81 per ton in Sydney. Another manufacturer gave the average price paid, delivered at a Hobart factory, as \$94.49 in 1910 and \$94.28 in 1911. It was said that imported sugar had been tried for jams, and that it gave some saving in cost; but there were offsetting objections, chiefly irregular deliveries, and the local company held the business by making monthly deliveries. It was explained that the local company regulated its prices by adding the duty of \$29.19 per ton to the c. i. f. price and then making a small deduction from the total. The imports of Australian-grown sugar into Tasmania were given as 5,550 tons in 1910 and 3,311 tons in 1911.

Cost to Grocers—Bounties—Imports and Exports.

Both jam manufacturers and leading grocers had much to say concerning the competition between jams and golden sirup, the latter being a by-product of the sugar refineries. An immense amount of this sirup is sold every year in Australia, especially to poorer families, who might buy jam instead if it was cheap. The wholesale price of golden sirup was given as 5 cents per pound, and the retail price 12 cents per 2-pound tin; while 8-ounce tins of plum or raspberry jam retailed for 16 cents. The cost of sugar to the grocers was stated as \$116.79 per ton (ton=2,240 pounds), or \$114.96 with the discount off, bags in. The retail price was \$124.90 per ton. The gross price for Mauritius sugar, which is preferred by local brewers, is \$111.92 per ton delivered in Hobart. That is \$77.86 in bond and \$34.06 duty and charges. The price of American glucose was given by a confectionery manufacturer as \$119.22 per ton f. o. b. Melbourne.

A bounty of \$1.46 per ton of cane of 10 per cent quality grown by white labor, provided the wages and conditions of such labor are fair and reasonable and in accordance with the provisions of the act, is granted by the Government.

The excise duty on manufactured sugar is 97 cents per hundredweight (hundredweight=112 pounds). The import duty on glucose is \$1.95 per hundredweight; on sugar made from sugar cane, \$1.46 per hundredweight; on invert sugar and invert sirup, including brewers' priming sugars, \$1.46 per hundredweight; sugar not otherwise specified, \$2.43 per hundredweight; golden sirup and sirup sugars not otherwise specified, \$0.73; molasses, free. Under these laws, the sugar production of the Commonwealth increased from 98,795 tons during the fiscal year 1902-3 to 147,470 tons for 1909-10, during which period the proportion of sugar produced by black labor declined from 68 per cent of the total to less than 10½ per cent.

Australia's import trade in cane sugar remained fairly extensive until 1906, the supplies coming principally from Java, Mauritius, and Fiji. In 1907 the exports exceeded the imports for the first time, the net exports having a value of \$807,348. In 1908 the excess of imports over exports was 96,218 hundredweight, valued at \$180,208, and in 1909 the excess was 1,832,943 hundredweight, valued at \$4,880,926. The principal countries to which Australian sugar is exported are Natal, Cape Colony, New Zealand, and New Caledonia; but the bulk of the sugar exported from the Commonwealth is not of Australian origin, but is really a reexport of sugar produced elsewhere. Out of 161,024 hundredweight exported during 1909, only 4,099

hundredweight was of Australian origin. The sugar reexported comes chiefly from Fiji, Mauritius, and Java.

Refineries and Output.

The establishment of the sugar-refining industry here considerably antedates the establishment of sugar milling, the raw material operated upon being originally brought chiefly from Mauritius and the East. There are two sugar refineries in Queensland, and one each in the States of New South Wales, Victoria, and South Australia, but there are none in either of the other States. All of these are under the control of the same company, which also operates a large refinery at Auckland, New Zealand.

In the five refineries of the Commonwealth an average number of nearly 1,500 hands are employed. During 1909 the State of New South Wales produced 14,810 tons of sugar and 1,072,000 gallons of molasses, the State of Queensland 134,584 tons of sugar and 4,763,635 gallons of molasses. It is anticipated by authorities in the sugar trade that, owing to recent shortage in the Queensland sugar crop, about 20,000 tons of sugar will have to be imported from other countries during 1912.

- POSSIBLE NEW BREAKFAST FOODS.

An American breakfast-food manufacturer is in Hawaii investigating the taro plant with the view of putting on the market a new food product made therefrom. Taro is a popular name for *Colocasia antiquorum*, and especially for its variety *esculentum*, a tropical plant, grown in the islands of the Pacific, where it forms a principal food. Its starchy, stemlike tuberous root is now boiled or baked, made into bread or into poi, a fermented product. The young leaves and tender leaf stalks are used, respectively, like spinach and asparagus.

Cassava, or mandioc, another starchy tuber, which grows abundantly in tropical America, might also prove valuable for conversion into breakfast foods. Cassava has long been sold in flaked form in India.

Bananas and plantains are also now flaked and crisped, samples of toasted plantain flakes from the Dominican Republic being among the exhibits at the Bureau of Manufactures in Washington; they will also be loaned to interested firms.

FREIGHT BY WATER TO PARIS.

[From Consul Carl Bailey Hurst, Lyon, France.]

The directors of Compagnie Générale de Navigation have decided to establish at once a freight-boat service leaving Paris for Lyon every week. The boats coming through internal waterways will not stop at intermediate river ports and will take 10 to 12 days for the single trip. As the freight rates by water will be very much less than by rail, shipments to Lyon of many classes of goods may now be made more cheaply than heretofore. This will be vitally helpful in forwarding to Lyon heavy merchandise not requiring immediate delivery. American exporters having business in this neighborhood would do well to bear this opportunity in mind, because every dollar saved in transportation will make sales easier on this market.

NOTES FROM AUSTRALIA.

[From Consul General John P. Bray, Sydney.]

Wireless Connection with Portuguese Timor.

Representation has been made to the Commonwealth Government by the authorities at Timor to establish a wireless station at Port Darwin, Australia, and in return the Portuguese authorities undertake to establish a station in Timor, Arafura Sea, which lies about 350 miles from Australia. The Postmaster General of the Commonwealth has the proposition under consideration, and it is said if the stations are erected they would be the first of a connecting series between Australia and the Far East, via Macassar and Hongkong.

Diamonds in New South Wales.

An expert from the diamond fields of South Africa, who has acquired a half interest in the pipe mine at Inverell, says that the opinion of several of the leading experts of South Africa is that if it prove a true pipe it will be found to contain larger stones than have so far been gotten out. He adds: "If I am satisfied that the prospects are good enough, cutters will come out to cut and polish the stones that are now being shipped to Europe in the rough, thus starting a new Australian industry." A well-known diamond expert from the Netherlands says that the Inverell stones are equal in brilliancy, when cut, to the best Brazilian, and denies the statement that Australian diamonds can not be properly cut. He has backed up his opinion with an offer to purchase the total output of the Inverell mine. [Previous mention of Australian diamond finds was made in Daily Consular and Trade Reports on Oct. 5, 1911.]

Meat Exports.

Shipments of mutton and lamb for the year 1911 showed a decided falling off from 1910, but exports of beef, veal, and pork made good gains. The following table will show comparison for the past three years:

Kinds.	1909	1910	1911				
			Total.	New South Wales.	Victoria.	Queensland.	South Australia.
Mutton.....carcasses...	1,665,747	3,132,387	1,963,713	1,096,067	636,821	186,579	54,246
pieces.....	23,360	52,574	72,120	69,300	1,674	1,146	.....
Lamb.....carcasses.....	1,276,351	1,737,871	1,429,975	309,572	966,325	12,532	141,546
quarters.....	398,957	639,991	728,775	33,239	12,769	682,767	.....
pieces.....	9,061	44,441	33,381	10,414	6,395	16,572	.....
Veal.....carcasses.....	6,100	8,747	13,395	8,831	3,537	1,027	.....
Pork.....do.....	4,300	7,671	14,767	7,053	6,384	1,300	30

New Automatic Postage-Stamp Machine.

There has been patented in Australia an automatic postage-stamp machine, the following reference to which was made by a daily paper of Sydney:

A demonstration was given by the Austral Automatic Machine Co. of a useful little machine which has for its object the doing away with the necessity of using postage stamps in commercial houses. This is achieved by depositing with the post-office authorities an amount equivalent to the value of the stamps they will probably use during a specific period. This amount is registered by the postal department on the machine which is then issued to the firm. Instead of affixing a stamp, the clerks push the end of any letters for the post into the machine, which

imprints a stamp recognized by the department, and the letter is franked. The machine, which is portable and about the size of an ordinary typewriter, automatically registers the amount of postage and correspondingly reduces the amount it has been made available for until zero is reached, and then seals itself until further credit is obtained from the postal department. It is an ingenious application of the automatic principle and is of undoubted utility. In its use it will prove an absolute prevention of pilfering of stamps. It is the invention of Mr. Arthur H. Wright.

Australian Interest in the Panama Canal.

A local newspaper recently contained a report of a speech delivered by the Premier of New South Wales with reference to shipping through the Panama Canal. The Premier is stated to have said:

Sydney is now the terminal point of the steamship lines already connecting Australia and the west coast of America, and two new lines are projected, the Australian headquarters of which will also be in the city of Sydney. Within a few years the great cut across the Isthmus of Panama will be completed, and steamers will come direct from New York to Australia. It will be of great advantage to the port of Sydney if the preeminence which it now holds in connection with the existing lines with the Western States is continued in the case of New York. Sydney, in fact, is the logical destination of ships sailing from New York via the Panama Canal to Australia, and we must see that the advantages offered by Sydney are properly placed before New York shippers. Undoubtedly, with the enormous home consumption in America, there will be room for an extensive trade with the United States in frozen meat, mutton and lamb particularly, which must be to the advantage of Australian stock producers and shippers. At present it is impossible to ship frozen meat to New York except by transshipping it at an English port, which would make the cost prohibitive, besides probably injuring the quality of the meat; but when the canal is completed about two years hence, the population of New York, like that of London, will be made familiar with Australian meat. If the proposals which are being made in America for the alteration of the tariff to make wool free should come to pass, we may expect the American textile workers to take an enormous quantity of our fine wools.

Australian Preference to British Goods.

The Daily Telegraph of Sydney announces that "preference will be given to articles of British manufacture against those of foreign manufacture" by the Tender Board of the State of Victoria for supplies required up to June 30, 1915. It seems this new departure by the Treasurer of Victoria was taken after representations had been made by the British Trade Commissioner.

A new provision has been inserted in the conditions of tender for supplies for the State of Victoria, giving preference to goods of British make for several years. A clause has been in force respecting tenders for general stores, setting out that "preference will be given by the Tender Board to tenders of articles manufactured within the Commonwealth, provided the quality of such articles is equal to the particular manufacture indicated in the schedule, and the rates charged are considered reasonable." In the general stores conditions now being circulated for supplies for the period commencing on July 1 next, and in nearly all cases terminating on June 30, 1915, these words are added: "Preference will also be given to articles of British manufacture as against those of foreign manufacture." The further stipulation is made that where the goods are manufactured in the Commonwealth, the raw material, when not produced locally, must as far as possible be of British origin. In the case of cotton goods it is specifically stated that articles must in all cases be British. This is the first occasion on which the principle of preference to manufactures of the home country has been given general application. Previously it had been limited to the paper required by the Government printer. Three or four years ago the paper makers in Great Britain were allowed preference over makers in the United States, who tendered through their Sydney agents, and it is stated that this has proved effective. The new proviso was introduced by the treasurer, Mr. Watt, after representations had been made by Mr. Hamilton Wickes, British Trade Commissioner.

Bakeries are said to be needed at the following Saskatchewan towns: Allan, Clavet, Grandora, Leney, Spy Hill, Unity, Waldron, and Young.

CANNING VALENCIA BITTER ORANGES.

[From Consul Robert Fraser, Jr., Valencia, Spain.]

The oranges canned in Valencia for use in the manufacture of marmalade are exclusively the bitter oranges grown in this district, supplemented occasionally by supplies of the same variety brought here by sea from the neighborhood of Seville.

The price paid by Valencia canners varies greatly either for Seville or local fruit, but as a rule is within the extremes of 75 centimos to 1.75 pesetas per arroba (15 to 32 cents per 27½ pounds). To this must be added about 75 centimos per arroba (15 cents per 27½ pounds) for shipping and brokers' expenses, loss in transit, etc., on the fruit brought from Andalusia. The latter is somewhat inferior to that from Valencia, having less juice and thicker skins. The cost of the fruit is lessened to the canners by the somewhat important amount obtained from sale of the seeds, amounting at present to 20 pesetas a barchilla (equivalent to 24 cents a quart). These are in great demand for the propagation of seedlings, which, when they attain sufficient size, are budded with sweet varieties of oranges.

Ten Steps in Process for Canning.

The operation of canning is extremely simple and may be divided into the following steps, each of which is performed by a different set of workers: (1) The oranges are immersed in hot water for a few moments and cleaned with a stiff brush, the immersion being solely for cleaning; (2) they are cut in half perpendicularly to their axes; (3) the interior is scooped out of the skins with a chisel-shaped wooden implement some 8 or 10 inches long by 1 inch wide; (4) the seeds are picked from the pulp by hand and the latter is (5) put in cauldrons where it is boiled by itself for half an hour; (6) it is then passed through a macerating machine, when it is ready to be mixed with the shredded peel and canned; (7) the skins, after the pulp has been removed from them, are fed into a machine which cuts them into long thin shreds such as may be seen in any ordinary marmalade; (8) these shreds are boiled by themselves for 45 minutes, when they are ready to be mixed with the pulp and canned; (9) the pulp and shredded peel are canned together in their original proportions—that is to say, the skin of one orange is here considered the proper amount to balance the pulp of one orange in the finished product, though British preserving houses frequently add extra pulp, which they obtain cheaply from manufacturers of essential oils and flavoring extracts, who use only peel for those purposes—(10) the cans are sealed and then boiled for 15 minutes, when the process is complete.

It will be noticed that no foreign substances of any sort, except the seeds, are either added to or subtracted from the fruit, and that the only machines used—not counting the boilers, which are simple open pans with an individual fire beneath each one—are two, the peel shredder and the pulp macerator. Both in the pulp-canning department proper and in the can-making department of the factory visited only 2 or 3 men were employed, the rest of the work being done by girls and women earning 14 to 27 cents for an 11-hour day.

The finished product, of which 150 tons were exported in 1911, is put up in 5-kilo (11-pound) tins and shipped almost exclusively to

Great Britain, where it is sold c. i. f. at from \$3 to \$4 United States currency per 110-pound case. [The manufacture of and trade in English orange marmalade was described in Daily Consular and Trade Reports for Feb. 17, 1911.]

WAGES OF GERMAN COAL MINERS.

[From The Economist, London.]

In a speech before the Reichstag concerning a general wage for the whole coal industry in the Ruhr district, Herr Sydow, Minister for Trade, pointed out that the wage paid in the Government coal mines is higher than the average rate of the field in two districts and lower in one. The yearly wages paid in these Government mines and the average for the district are shown in the following table:

Year.	State mines.	All mines.	Year.	State mines.	All mines.	Year.	State mines.	All mines.
SILESIA.			RUHR.			LORRAINE.		
1908.....	\$275	\$247	1908.....	\$365	\$364	1908.....	\$288	\$310
1909.....	265	240	1909.....	354	327	1909.....	276	297
1910.....	259	235	1910.....	362	336	1910.....	273	299

The wage received by the miners varies between different parts of the field and between different mines. In the Ruhr district, the wage paid by the State is higher, as the district in which the mines are situated is less built up and less accessible than the other districts.

NOTES OF THE RUSSIAN FAR EAST.

[From Consul John F. Jewell, Vladivostok.]

A teachers' school and seminary will shortly open in Khabarovsk, upon the initiative of the governor general of the Priamur district.

Tiger hunting by the Ussuri Cossacks was very successful during the past winter, 15 tigers being killed and 12 caught alive, 10 of which were sent to Hamburg for sale. Small parties hunting tigers for sport also met with much success.

False scales.—An interesting decision by the Irkutsk district court has recently been reported in the Dalny Vostok. On account of conviction for using false scales in their business, several persons have been deprived forever of the right to participate in any kind of trade.

Fur shipments from Vladivostok, Nikolsk-Ussurisk, and other points along the Trans-Siberian Railroad began late this year. The chief kinds are squirrel; very little sable and fox. It is expected that the prices will increase considerably, especially as the furs from the Amur Province arrived late for the Irbit fair.

HEAVY MARINE LOSSES.

[From London Financial Times.]

During the first three months of this year, 47 vessels, representing \$8,313,000, became losses under marine insurance policies effected in London, either with Lloyd's or with the Marine Insurance Companies, or both. In addition five vessels are missing, and if these be included the loss incurred by London underwriters during the past three months reaches the gigantic total of \$9,980,000. The only underwriters who have really made money of late have been those interested in the speculative market, which caters for war risks, Oxford and Cambridge boat races and the budget, to say nothing of epidemics and other ills.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8611. Rails and iron bridges.**—An official of the American Chamber of Commerce for the Levant reports to the Bureau of Manufactures that tenders will be asked shortly by the Government of Bulgaria for rails and iron bridges for the State railroads. Plans and specifications will cost \$4 to \$10, according to the tender, and interested American firms should keep in touch with the official so as to be prepared to bid.
- No. 8612. Railway ties.**—A business man in a European country desires to be placed in communication with American producers of oak, beech, and cedar ties, both plain and treated with preservative material; he also desires samples of the tamarack wood, with prices and definite information as to the results obtained from its use as railway ties. The applicant is in haste for prices c. i. f. certain ports on the chemically treated ties in order that he may close a contract. The sizes of the ties used are 240 by 14 by 24 centimeters (7.874 feet by 5.51 inches by 9.448 inches) and 220 by 18 by 13 centimeters (7.217 feet by 7.186 inches by 5.118 inches). Correspondence may be in English, French, German, or Italian.
- No. 8613. Dry kalsomine, dry glue, and wall papers.**—An American consular officer in Canada reports that a firm in his district applies for the agency in a certain Province for an American line of dry kalsomine, dry glue, and wall papers. References are furnished.
- No. 8614. Leather, safes, household effects, and provisions.**—A firm which has several stores in Asiatic Turkey requested an American consul to place it in touch with American exporters of sole leather and belting, safes, iron bedsteads, chairs, wood furniture, glassware, kitchen utensils, stationery, biscuits and crackers, preserves, confections, chocolate, etc. Prices should be quoted c. i. f. a certain port. Correspondence preferred in French or German.
- No. 8615. Metallic filament electric lamps.**—An American consular officer in England has forwarded to the Bureau of Manufactures the name of a firm in his district which desires the names and addresses of makers of metallic filament electric lamps in the United States.
- No. 8616. Aeroplanes.**—An officer connected with an American Chamber of Commerce in the Levant requested the Bureau of Manufactures to place him in touch with manufacturers of army aeroplanes in the United States. Descriptions and prices should be forwarded to the applicant without delay.
- No. 8617. Plumbing goods, etc.**—An American consul in Russia reports that firms in his district have requested catalogues and price lists from American firms dealing in sanitary and plumbing goods and porcelain and metal ware used for canalization and heating.
- No. 8618. Portable houses.**—The chief engineer of a waterworks system in a European country expressed a desire through a consular officer to import American portable houses for use in connection with the city's waterworks. Those interested should send catalogues and price lists to the engineer, whose address is on file in the Bureau of Manufactures.
- No. 8619. Coir extracting and rope manufacturing machinery.**—An American consular officer in the East Indies reports that a company in his district requested catalogues and price lists from American manufacturers of machinery for extracting coir fiber, spinning the same, and making it into rope, etc. Catalogues and price lists should also be sent to the consulate general.
- No. 8620. Crude cottonseed oil.**—A firm in Canada requested an American consul to place it in communication with crushers of cotton seed in the United States with a view to purchasing crude cottonseed oil. The firm wants to deal with the producer and not with the refiner.
- No. 8621. Gas tar.**—An engineer of a gas works in South Africa informs an American consul that 100,000 to 150,000 imperial gallons of crude coal gas tar for road making are desired for shipment to that country. The tar must be shipped in casks or barrels. Prices including casks or barrels f. o. b. New York are requested.

- No. 8622. Carpet-weaving machines.**—An American consular officer in the Far East reports that a factory for the manufacture of grass carpets and rugs is to be established in his district, and he is advised that the weaving machines used in the United States (at Oshkosh) are considered more desirable than those in use. The consular officer is informed that an American firm has agreed to purchase 1,500,000 yards of grass rugs annually from this mill for a period of five years.
- No. 8623. Fiber.**—An American consular officer in the East Indies transmits to the Bureau of Manufactures the name of a firm which desires to correspond with American importers of fiber used in the manufacture of brushes and similar articles, with a view to introducing its fibers.
- No. 8624. Pitch.**—The manager of a coal mine in Belgium informs an American consul that he desires quotations from producers of pitch in the United States with a view to importing same for the manufacture of briquets. Correspondence may be in English.
- No. 8625. Photographic machine.**—An American consul in the United Kingdom reports that a firm in his district desires to get in touch with manufacturers of automatic photographic apparatus, those that operate after a coin is inserted and while the person stands on the platform.
- No. 8626. Brick-molding machine.**—An inventor of a new kind of building brick who contemplates the erection of a large brick-making plant requested an American consul in Belgium to place him in communication with a reliable manufacturer of brick-molding machines in the United States.
- No. 8627. Forging and casting machines.**—A reliable wholesale and retail house in France informed an American consul that it desired catalogues and price lists from manufacturers of forging and casting machines in the United States.
- No. 8628. Representation in Chile.**—American Consul Alfred A. Winslow, of Valparaiso, Chile, reports to the Bureau of Manufactures that a resident of that country expects to be in New York for two or three weeks in May, and he would be glad to meet American manufacturers who desire an active representative in Chile.
- No. 8629. Knockdown furniture.**—An American consular agent in Spain has forwarded the name of a merchant in his district who desires catalogues on mission and knockdown furniture. Prices, cash, f. o. b., Philadelphia or New York should be stated. The consular agent also wants two sets of these catalogues for filing purposes.

English Smoke-Abatement Exhibit.

Commercial Agent Archibald J. Wolfe reports that at the International Smoke-Abatement Exhibition held at Royal Agricultural Hall, London, the last week in March no apparatus was exhibited direct from the United States, although a number of French and German smoke-abating devices and fuel economizers were shown. As the minds of the industrial men of the United Kingdom are now earnestly turning to the subject of fuel economy and the substitution of oil and gas in place of coal for heating, lighting, and power, an important opportunity seems to have been lost by American manufacturers. [An announcement of this exhibition appeared in *Daily Consular and Trade Reports* for January 12, 1912. The official catalogue of the exhibition and a collection of advertising literature gathered there on the subjects of gas heaters, automatic stokers, smoke consumers, etc., are forwarded by Mr. Wolfe and will be loaned by the Bureau of Manufactures.]

Coal.—Consul General R. M. Bartleman sends a special list of coal importers at Buenos Aires, Argentina, which may be had from the Bureau of Manufactures.

AN EDIBLE MEXICAN TUBER.

[From Consul Samuel E. Magill, Guadalajara, Mexico.]

The chinchayote is the tuber of a gourdlike plant grown in the State of Guadalajara, whose botanical name is *Sechium edule*. The year-old tubers are boiled and candied and are sold by street venders, being very popular among laborers and children. The larger, 2-year-old tubers are sliced and fried for table use. The present price is about 1 peso (\$0.498) for 25 pounds.

These tubers yield an excellent starch, similar to arrowroot or sago, and an inquiry was recently received at this consulate from an American firm regarding the possibility of their use in starch making. The plant is not extensively cultivated here and it is doubtful if American manufacturers could satisfactorily contract for a certain acreage to be planted. To insure a supply, such a firm would have to do its own planting on its own land. All the starch manufactured here is made from corn, no chinchayote being thus consumed. Cassava is not grown at this altitude.

Above ground the chinchayote is similar to a gourd plant, with a smaller leaf, and the flower develops into a bulbous fruit covered with prickly spines called the chayote. The tubers are the part known as the chinchayote, and these resemble a sweet potato in shape, the color under the skin being white. Each plant produces 10 to 30 tubers, having a total weight of 5 to 30 pounds, varying with age, as some plants are allowed to grow for two years, producing larger and more numerous tubers.

For cultivation, the chayotes are sprouted in a moist place and then planted, sometimes three plants together. The planting season is from February to April, and the plant requires little attention thereafter. The chayotes, or fruit, are gathered in September or October, and the chinchayotes, or tubers, mature from October to December, being taken up when they reach the desired size. The shrubs are planted 7 to 10 feet apart, loose soil that has been used for other crops being the best. The tubers grow in all directions, but mainly perpendicularly. No reliable statistics as to the acreage under cultivation or the amount which one man can cultivate are available.

The average wages now paid to field laborers here are about 50 centavos (25 cents) for a 12-hour day, with two hours off for meals. For the manufacture of starch, water power is available in some places, and electric power can be obtained near Guadalajara for \$6 per horsepower per month. Coal for factories costs about \$10 per ton on cars here.

[The Department of Agriculture states that the chinchayote is grown in Florida, California, Louisiana, Porto Rico, and the United States' tropical possessions, but that it has no record of its being put to commercial use in this country.—B. of M.]

Rate of Exchange in Honduras.

Consul Claude I. Dawson reports that during March the rate of exchange prevailing at Puerto Cortes and that part of Honduras was 40 cents gold for the Central American sol—equivalent to a premium of 150.

DAILY CONSULAR AND TRADE REPORTS

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NEW RAILWAYS IN CHINA.

[From Consul General Leo Bergholz, Canton.]

The destiny of the Canton-Macao Railway lies with a group of local Chinese, who are now advertising in native papers for capital with fair success. The route has already been surveyed and it is probable that construction work will be commenced at an early date. Starting at Fati, across the river from Canton, the line will run almost due south, through the districts of Shuntak and Heungshan, to the boundary of the Portuguese colony of Macao. It will be about 70 miles long and will penetrate one of the richest districts of South China.

The country through which it passes is low lying, intersected by innumerable creeks and given over to rice, fruit, and vegetable culture. A 30-mile branch will connect the main line at Chentsun with the Sunning Railway at Kongmoon, via Kaukong.

Territory Served—Exports and Imports.

There are no very large cities on the railway, but there are innumerable villages and several towns of 10,000 to 50,000 people, among which may be mentioned Chentsun, Shuntak, Heungshan, Chingshan, Kamchuk, and Kaukong, the last two of which are ports of call for foreign steamers plying on the West River. The southern terminus of the main line will be within 5 miles of the new commercial port of Heungchow, now in process of construction, and will undoubtedly have some effect in hastening the completion of that pretentious scheme. [For an article relative to Heungchow see Daily Consular and Trade Reports dated Feb. 6, 1911.]

The people of the Shuntak and Heungshan districts are wide-awake and progressive, and have come under the influence of a large number of Chinese returned from abroad. There are probably no richer districts agriculturally in China.

So dense, however, is the population that large quantities of rice have to be imported from abroad to help out the local crops. Sugar cane is grown on a considerable scale and turned into brown sugar

for local consumption and export. Among the other manufactured articles exported from the districts touched by the railway are palm-leaf fans, mats and matting bags, groundnut, cassia, and bean oil, samshu, coarse chinaware, paper, and firecrackers. Animals shipped alive for slaughter, poultry fresh and preserved, fresh fruit, dried and salted turnips and other vegetables, native medicines, and firewood may be said to complete the list of major exports.

The principal imports are kerosene, cotton and woolen piece goods, raw cotton and cotton yarn, matches, timber, metals, coal, saltpeter, foreign clothing and hats, shoes, umbrellas, sugar, dried and salted fish, flour, vermicelli, and macaroni.

Trade Expansion.

The natives of this section originally used, and to some extent still use, groundnut and other native oils for illuminants, but the steadily increasing sales of kerosene point to an early disappearance of the native article. The market for cotton piece goods is considerable, but apparently not growing. The people prefer native woven cloths for all uses to which they can be put, and the steady increase in the number of cotton mills in China, supplemented by innumerable hand looms, bids fair to make any expansion in the local market improbable. There is, however, a good market for foreign-made clothing, hats, caps, and other haberdashery, shoes, etc.

The taste for things foreign is not confined to clothing but extends to many articles of personal adornment and to condiments and provisions, including tinned fruits, vegetables and meat, wines and liquors, cigars and cigarettes, and condensed milk. A small cigar factory, using locally grown leaf, has recently been started in the territory served by the railway, a factory for putting up a local fish has been operated for some time in Macao, and several factories for tinning rice birds, bamboo shoots, and lichees, carambolas, and other Chinese fruits have been erected within short distances of the line.

At the present time the only means of transportation and communication are boats on the innumerable creeks which intersect the delta, and wheelbarrows on the little paths which delimit the paddy fields. Both of these will remain as valuable feeders to the railway, but they will pass out of existence as means of communication between intermediate points and termini. The district draws upon Canton, Macao, and Hongkong for its foreign goods, and the completion of the railway will bring all these places incomparably nearer to it. The new line will also afford the people a wider market for their fresh fruit, vegetables, eggs, and other perishable articles.

The Canton-Amoy Railway.

The construction of a railway from Shekwan, across the East River from Shek Lung on the Canton-Kowloon Railway, to Amoy has been under consideration for a number of years, and in 1906 a survey of the route was made. The line is to be built by Chinese syndicates representing the people of the two Provinces through which it will pass—Kwangtung and Fukien. No advance has been made beyond the survey of the line, and it is probable that some years have still to elapse before construction work actually commences. The line will have a length of 275 miles in Kwangtung and about 100 miles in Fukien. It will penetrate a thickly populated country in a high

state of cultivation, and will bring rail communication to several important cities now served only by inferior waterways.

The western terminus, Shekwan, is a busy town of some 10,000 people, drawing its importance from its situation at the apex of the East River delta, opposite Shek Lung, which has a population of about 20,000. It shares with Shek Lung in the distributing trade of the delta and of a large area along both sides of the river to the east. The country about it is fertile and is devoted largely to the cultivation of rice, and bananas, lichees, and other fruit, and sugar and cattle and swine raising. From Shekwan the route follows a general easterly direction, through Waichow, to Louk Fong, and then striking north-by-east touches Kityang and Chaochowfu. From the latter place it takes at first a southeasterly and then a northeasterly direction to Wong Kong on the Fukien border. At Chaochowfu it crosses the Swatow-Chaochowfu Railway, giving it rail connection with the sea at that point.

A Populous District.

The first important city reached after leaving Shekwan is Pok Lo (with 100,000 inhabitants), whose trade has been overshadowed by that of Waichow, which has a population of 300,000. At Waichow the East River turns abruptly to the north and runs for over a hundred miles through broad and fertile valleys, thickly settled and well cultivated. To this fact is largely due the importance of Waichow, which serves commercially both this valley and that south of the river. The principal products of this section are rice, fruit, swine, and poultry. Small craft feed the city's trade from the north, while boats drawing up to 3½ feet can reach Waichow from the delta except during the season of low water. The completion of the railway will doubtless be followed at an early date by the opening of Waichow to foreign trade, as provided for in the British commercial treaty of 1902.

The line leaves the river at Waichow and runs to Hoi Fong through a hilly country interspersed with valleys and dotted with towns and villages. Of the latter only Ping Sang, Sam To Chou, Ko Tam, and Kung Ping need be mentioned. These are market towns, each serving its little valley or two and each with a population of about 10,000. Hoi Fong and Louk Fong are walled towns of 10,000 inhabitants each; both can be reached from the sea by small junks. All the way from Waichow to Louk Fong fruit, rice, and cattle are raised and small timber cut. At Louk Fong the line turns to the northeast and after passing Kwai Tam, a walled market town of 10,000 people, and Pou Ning, a walled city of 100,000, reaches Kityang. This section is through more level country where cattle, pigs, poultry, and water buffaloes are raised; and rice fruit, grain, and sugar grown.

Many Small Towns Along the Route.

Before Pou Ning is reached the country becomes thickly dotted with small villages and towns. It is a rich agricultural district. The city of Pou Ning lies on a tributary of the Swatow River and is accessible by small craft. Its importance is overshadowed by that of Kityang, however, which stands on the river itself and can be reached by boats drawing up to 10 feet. Kityang, with a population

of 400,000, is a walled city upon which a large area to the north depends for its supplies, which this city in turn gets from Swatow.

From Kityang the line passes through a well-cultivated district to the prefectural city of Chaochow, population 500,000, situated on the Han River and connected with Swatow by a short railway constructed some years ago. Chaochowfu is an important collecting and distributing center for the Han Valley and considerable areas on both sides of it. Its foreign port is now Swatow, but with the completion of the line from Canton it will be able to draw easily upon Amoy as well as upon Hongkong and Canton itself.

There are no further important towns until Wong Kong is reached. This city with a population of 60,000, lies just within the provincial border and has a considerable trade in oranges and other fruit, indigo, vegetables, rice, sugar, cattle, and dried fish. It has water communication with the sea for craft drawing up to 1 foot only. The railway should find a market for its produce at Amoy, Chaochowfu, and Swatow.

What the Railway Means to Trade Interests.

It will have been observed that practically all the country through which the line from Canton to Amoy passes is agricultural, and so far without important manufactures; that, in other words, the purchasing power of the people is dependent upon the success with which they market the produce of the soil. The slow transport service offered in the past by native boats has made it impossible to go any distance from the fields to market and has seriously restricted the area of sale. It stands to reason that when Chaochowfu and other places along the line can ship their perishable fruit, vegetables, etc., to Canton, Hongkong, and Amoy by rail in a shorter space of time and more cheaply than they can now ship them a tenth of the distance by boat, only indifference on the part of the people themselves can prevent the inauguration of an era of increased prosperity.

It will have been observed, too, that the people who will be served by the railway, while able to feed themselves on fruit and vegetables, are dependent upon others for their clothing, many foreign articles of food, cotton and cotton yarn, illuminating oil, and coal (where it is used for fuel), besides many other articles known as sundries. These are now obtained from the open ports of Swatow and Canton or direct from Hongkong by junk at, in every case, a much greater expense than would be involved in importing them by rail. The people of this section have taken kindly to many foreign articles—some necessities, some luxuries; and, given a greater purchasing power, there is every reason to expect an increase in the demand for foreign imports.

[A comprehensive review of the railway situation in China, covering existing and contemplated lines, issued in pamphlet form as Special Consular Reports No. 48, may be obtained from the Bureau of Manufactures.]

The Peruvian budget for the fiscal year ending June 30, 1912, shows ordinary income of \$15,936,411 and special revenue \$188,236; and provides, according to a report from Consul General W. Henry Robertson, of Callao, for \$8,157,784 ordinary and \$8,668,447 special expenditures, thus creating a deficit of \$701,584.

CONSTRUCTION WORK ABROAD.**TASMANIA.**

[From Consul Henry D. Baker, Hobart.]

In connection with Tasmanian railroad construction it has been the custom to advertise locally for tenders for any work to be done in connection with extensions, etc., the contractors who are the successful bidders, performing the work under supervision of the engineer in chief, Public Works Department. Nearly all the material required for railroad development is purchased in England, except that steel girders are occasionally bought in Melbourne. When for instance steel rails are required, the Agent General of Tasmania in London is instructed to advertise for tenders among British manufacturers.

New Competitive System—American Bidding.

Until quite recently the Tasmanian Government made it an invariable policy to permit none other than British or Australian manufacturers to compete in tenders for supplies, and to purchase nothing in any other country that could be obtained in Great Britain or Australia. However, in October, 1911, the Tasmanian railroads were placed by the State parliament under the control of a commissioner, who is to hold office for four years, and have full authority to operate the railroad system on business principles, and independent of any political considerations. Shortly after assuming office some steel rails were purchased in England through the agent general in London, and with regard to the tenders having as usual been restricted to British manufacturers, an American firm wrote to the new commissioner to the effect that they could have landed the rails in Tasmania at about \$3.60 per ton cheaper than the price at which they were supplied from England. The commissioner wrote in reply that the next time any steel rails were required, which he did not think would be for a year or so, American as well as English firms would be given the opportunity to submit bids.

In the case of any appliances or equipment being desired for Tasmanian railroads, the order is given to local merchants, if the articles required are such as may be manufactured locally or kept locally in stock. A good deal of repair work and equipment of a simple sort are supplied by the Salisbury Foundry Co., of Launceston, Tasmania. When it has been deemed necessary to import articles from the United States, as lately in the case of hand cars and motor cars, the orders have been given to the Sydney representatives of several leading New York export commission houses.

How Offers May Be Made.

There is comparatively little new railroad construction in Tasmania, probably not averaging over 2 miles a year, and there is scarcely any attempt at using improved appliances to save labor. American firms which may desire to introduce new appliances, machines, or equipment into the Tasmanian railroads might send their catalogues and address letters to John McCormick, Esq., engineer in chief for Public Works Department, Hobart, Tasmania. At the Agency General of Tasmania in London, 5 Victoria Street, London, S. W., a consulting engineer (Mr. William Harvey) is employed to

give advice concerning purchase in England of equipment for railroads and other public works. In the case of American manufacturers who may be represented in England, but not in Australia, it might be well to get in touch with Mr. Harvey concerning purchase of supplies for Tasmanian public works. The new commissioner of the Tasmanian Government railroad headquarters, Hobart, is Mr. George W. Smith; the chief engineer of existing lines, Mr. C. C. Nairn; chief mechanical engineer, Mr. R. Deeble; telegraph superintendent, Mr. J. J. McDonald, and chief storekeeper, Mr. S. R. Fisher. The building of Government roads, bridges, jetties, and other public works, as well as railroads, is also under control of Mr. John McCormick, Public Works Department. There is the same general system of purchasing supplies for other public works as applies to the purchase of railroad material.

Railroad Mileage—Government Purchases.

The Tasmanian Government railways now comprise 470½ miles, a gain of only about 8 miles within the last five years. The total cost of construction and equipment of the lines open on June 30, 1911, was \$19,827,178, representing a cost of \$42,160 per mile. No information is given in Government reports as to the precise cost of various supplies and equipment purchased, and when bids are accepted information concerning prices is not disclosed. Individuals or firms desiring to sell material here can not expect to find out what prices the Tasmanian Government might be willing to pay, but must state the prices at which they may be willing to sell. In the case of steel rails, I understand that the average price paid has been about \$50 per ton landed in Tasmania. The only details concerning supplies purchased for the Tasmanian Government railways for 1910-11 appear in the latest report of the Government railways as follows:

Fuel: Native coal, 17,265 tons; Newcastle coal, 9,763 tons; charcoal, 2 tons 8 hundredweight; coke, 400 loads; firewood, 2,777 tons.....	\$117,584	Packing: Square and round, 435 pounds; asbestos, 77 pounds; hemp, 18 pounds; 1. R. insertion, 42 pounds; cotton waste, 15 pounds.....	\$2,237
Oils: Axle, 4,915 gallons; bearing, 1,792 gallons; castor, 3,840 gallons; colza, 2,239 gallons; cylinder, 1,697 gallons; linseed (raw), 508 gallons; linseed (boiled), 112 gallons; red machinery, 260 gallons; kerosene, 10,598 gallons; sundry, 620 gallons.....	10,424	Stationery, etc.....	10,166
Tallow, etc.: Tallow, 29 hundredweight; grease, 7 hundredweight.....	257	Timber.....	37,759
Paints and varnish.....	4,311	Iron.....	30,206
		Tools.....	4,606
		Electrical material.....	2,150
		Sundries.....	28,406
		Rails and fastenings.....	41,058
		Total.....	298,215

The present rolling-stock equipment of the Tasmanian railways is given in this 1911 report as follows:

Description.	Erected new.	Repaired.		Painted and varnished.
		Light.	Heavy.	
Locomotives.....		37	15	-----
Carriages.....		653	65	47
Vans.....		222	25	14
Wagons.....	136	1,949	306	119

1 One fitted with vacuum brake.

There are three private lines open for general traffic in Tasmania, all situated in the western part of the island: The Emu Bay Railway

Co., headquarters Burnie, Tasmania, James Stirling, manager, operating 104 miles; the Mount Lyell Mining & Railway Co., headquarters Queenstown, Tasmania, Robert C. Stich, manager, operating 52 miles; and the Magnet Silver Mining Co.'s Railway, headquarters Mount Magnet, R. F. Waller, manager, operating 10 miles.

Harbor Work—American Supplies.

Considerable harbor improvement from time to time is carried on by the marine boards of Hobart, Launceston, Burnie, Devonport, Stanley, Table Cape, Leven, and Strahan. The most important work of this sort is that now being started at Hobart, which will require an expenditure of about \$500,000. In connection with such works it is usual to advertise for tenders, and as not more than 30 days are allowed for answer of the advertisements, the contracts must necessarily go to local firms unless foreign firms have representatives here who are in a position to immediately submit bids. There are also various street improvements, construction of abattoirs, waterworks, etc., carried on also by contract under the direction of different municipalities, such as Hobart, Launceston, Zeehan, Queenstown, Devonport, Deloraine, Cambelltown, Stanley, and Strahan. Communications to different marine boards may be addressed to their master wardens or secretaries, and to different municipalities to mayors, or town clerks.

The chief difficulty in connection with the sale of American supplies for Tasmanian public works is that such short notice is given for tenders (never more than 30 days) that there is not time for American firms to be apprised of such opportunities in time to compete. The only remedy for this is to have direct representation in Australia so as to make it possible to immediately be prepared to bid as occasions arise. One American steel corporation is directly represented at Sydney and is now securing considerable business in the supply of iron and steel for different parts of Australasia. Usually there is sufficient time for importing the material required after acceptance of the tenders. American manufacturers also are handicapped by preferential tariffs favoring the United Kingdom. In case of goods required for the Commonwealth Government, no duty need be paid, the customs being under the control of this Government. In the case, however, of goods destined for different State governments, marine boards, municipalities, etc., duty must be paid the same as if imported by individuals.

As most public works in Tasmania are carried out by contracts with private firms, lists of the leading contractors in Tasmania who bid on such works, the leading local dealers in machinery, ironworks, and other supplies, are forwarded [and may be had from the Bureau of Manufactures].

FORMOSA.

[From Consul Samuel C. Reat, Tamsui.]

Electric Lights—Gas Enterprise.

The Government has granted a franchise to a Japanese and Chinese company, capital \$100,000, for building an electric-light plant in the city of Shinchiku, with an initial 2,000 lights. The president is S. Kinoshita, of Taihoku, also president of the Taihoku Sugar Co.

Keelung, the principal port in north Formosa, will be provided with gas by the Taiwan Gas Co. This makes the third city to utilize both gas and electricity for lighting purposes.

Large Sum Asked for Harbor Improvements.

The Government of Formosa has presented to the Imperial Diet a bill for an additional appropriation of \$7,500,000 for harbor improvements, \$5,000,000 to be used for Takao and \$2,500,000 for Keelung. The latter harbor will be dredged to 32 feet to accommodate 10,000-ton class steamers. At Takao the 20-foot depth will be extended to over 30 feet. As this is the port from which sugar is exported, its importance has advanced as the sugar industry has grown. Practically all the sugar machinery is imported through this port. A report on the Keelung harbor, from this consulate appeared in Daily Consular and Trade Reports for November 29, 1911. The following are some facts concerning the Takao construction:

Water area, 100 acres, varying from 12 to 24 feet deep. The bar in the outer harbor has been dredged to 18 feet at low water. Total length of landing place completed by end of 1911, 9,000 feet; depth alongside, 9 to 18 feet. Anchorage in inner harbor, 50 acres, with depth of more than 18 feet, where 6 steamers of 3,000 tons can be berthed simultaneously. Here cargo can be worked with great safety.

Anchorage and outer harbor has depth of 35 feet, but opens to south and west, making great difficulty when southwestern monsoon prevails in summer, for working cargo by cargo boats. Largest steamer entering harbor during 1911 was *Cassara* (British), 3,825 tons, draft 18 feet.

CANADA.

[From Consul G. Willrich, Quebec.]

Dry Docks Subsidies, and Construction of New Graving Dock.

The passage on March 30 of an act in the House of Commons of Canada to amend the dry docks subsidies act of 1910 is of great importance to the port of Quebec, which for years has looked forward to the construction here of a graving dock commensurate with the needs of a fast increasing trans-Atlantic shipping business.

The amendment enables the Government of the Dominion to grant a subsidy equal to 3½ per cent on \$5,500,000, to any company that will undertake to build a dry dock at Quebec, and at such other ports as may be designated. Under the law as it stood a subsidy was limited to the same percentage on not exceeding \$3,500,000, which was not a sufficient inducement to builders of dry docks, no offers being received by the Government for their construction at the several Canadian ports now in need of them.

By thus increasing the amount on which the Government will pay a subsidy, it is believed that offers will be received at least for the construction of a graving dock at Quebec, not only because of the absolute need here for one of modern construction and largest capacity, but there is every prospect that such dock will give a fair return on the money invested.

Excessive Marine Insurance Rates.

This legislation has undoubtedly been hastened by the sending of a strong delegation of Quebec citizens to the Federal capital urging the needs of this port and pointing out especially the excessive rates of marine insurance due to the absence of a dry dock at this port or elsewhere on the St. Lawrence, below Quebec, able to accommodate ocean vessels even of average size when in need of repairs.

The insurance rates to Quebec and Montreal were shown to be exceptionally high in comparison with those at other ports, as will readily appear from the following figures quoted by the delegation:

Rates on provisions, etc.—To Quebec and Montreal, to September 10, 25 cents; to Halifax and St. John, to September 10, 20 cents; to Portland, 15 cents; to Boston and New York, 12½ cents.

Rates on grain and general merchandise.—To Quebec and Montreal, to September 10, 25 cents; to Halifax and St. John, to September 10, 17½ cents; to Boston and New York, 15 cents.

Increased rates to Quebec and Montreal after September 10: To September 26, 30 cents; October 10, 35 cents; October 26, 45 cents; November 10, 55 cents; and after that date 65 cents. Rates to Boston and New York do not increase during the same periods. Insurance rates at Montreal and Quebec averaged 35 cents as against 15 cents for Boston and New York.

The excess of insurance on the total value of Canadian exports by sea was estimated at over \$700,000, one-half of which at least, it is believed, must be debited to the increased risk of navigation due to the absence of proper dry-dock facilities in Canadian ports, and which sum could be saved by the establishment of modern dry docks at Quebec and other Canadian ports.

The fact that there are now at least 15 to 20 ships navigating the St. Lawrence River which could not be repaired if a serious accident happened to them was quoted to emphasize the immediate need of a modern dock at Quebec.

DOMINICAN REPUBLIC.

[From Consul Charles M. Hathaway, Puerto Plata.]

Plans for the Harbor Works.

With reference to the surveys for the harbor improvements at Puerto Plata as announced in Daily Consular and Trade Reports for March 1, the engineers have finished their work here and gone to Santo Domingo City. I am told that they are still working up their notes, but expect to submit the complete plans to the Dominican Government by April 30. If the plans are then approved, bids will probably be asked for at once. I understand that the Spanish engineers who made the survey are planning to bid. The work will be under the general direction of the Secretario de Estado de Fomento y Comunicaciones, but particularly in the charge of Mr. H. R. D. Burke (an American), director of the Departamento de Obras Públicas. The money for this improvement is, I understand, already set aside in New York under the terms of the American-Dominican convention.

FRANCE.

[From Consular Assistant Bartley F. Yost, Paris.]

Municipal Dwellings for the Poor.

The municipality of Paris is seriously considering floating a large loan for purchasing vacant lots and erecting dwelling houses to be rented at a very low rate to the poorer classes. The constant and rapid increase of rents has made serious the problem of housing the poor of Paris, and it is hoped that this will bring a measure of relief. The commission appointed to thoroughly study this question has submitted its report, from which the following vital points are gleaned:

A fractional loan of 200,000,000 francs (\$38,600,000) bearing 3.80 per cent interest is recommended, payable in 75 years from 1915, or

in periods of 75 years from a date two years after the successive floating of these loans. The loans are to be secured in part by the city (1) by offering the rents as security and (2) the resources of the municipal budget. The proceeds of these loans are to be utilized for constructing dwellings to be reserved in part for families with more than three children less than 16 years of age, or who are incapable for reason of health to gain their own living. The supervision of the construction will be confided to an architect chosen by the *prefet*.

The following rent schedules of the apartments shall not be lower than the following:

For families counting not more than three children—4 rooms, 400 francs (\$77.20); 3 rooms, 333 francs (\$64.27); 2 rooms, 233 francs (\$44.97).

Families counting more than three children—4 rooms, 300 francs (\$57.90); 3 rooms, 290 francs (\$55.97); 2 rooms, 179 francs (\$34.55).

The rents are to be calculated in such a manner as to insure annual returns of 5.70 to 6 per cent on the capital invested, including depreciation, the rents varying according to cost of the land and expense of construction. The charges for use of baths, washrooms, garages, etc., are in addition to general rents, sufficient to cover cost of operation, interest on cost, and depreciation.

A list of sites belonging to the city or to public charity organizations, suitable for sanitary dwellings, is to be prepared. In communities where the space is too limited, adjoining ground will be secured. The first group of municipal buildings will be erected along the Avenue Emile-Zola, rue de Javel, and rue Henri-Becque.

[From Consul Carl Bailey Hurst, Lyon.]

New Bridge over the River Rhone.

A project has been laid before the municipal council of Lyon to erect, in addition to the numerous bridges crossing the Rhone and Saone and connecting the different parts of the city, another bridge over the Rhone near the confluence of the two rivers. It will be 740 feet long and 65 feet 7 inches broad between the parapets, with three sidewalks and two roadways, the whole estimated to cost \$308,800. Bridge-building specialists are invited to offer plans. The dossier, with documents giving all the requirements, is filed with the commissioner of public highways. Inquiries should therefore be addressed in French to Monsieur le Directeur de la Voirie, Lyon, Rhone, France. [Consul Hurst's extended description of the proposed bridge will be loaned on application to the Bureau of Manufactures, Washington, D. C.]

ROUMANIA.

[From American Minister John B. Jackson, Bucharest; see also Daily Consular and Trade Reports for Apr. 1.]

Large Sum for Public Works.

The municipal council of Bucharest has applied to the Government for authorization to contract a loan of 30,000,000 francs (\$5,790,000) at 4 per cent, payable within 50 years, the proceeds to be applied to constructing a city hall, with the necessary installation and furnishings, extending the local tramway system, and to constructing an electric-power plant, filters, sewers, crematories, and other municipal improvements.

INDIAN WOOLEN INDUSTRY.

[From report by the Director General of Commercial Intelligence at Calcutta.]

Of the five woollen mills of India, two—one at Cawnpore, in the United Provinces, and the other at Dhariwal, in the Punjab—have between them a paid-up capital of 32 lakhs of rupees (\$1,036,800), and produce 82 per cent of the total outturn of the Indian mills. These two mills weave cloth for the use of the army and police, and articles of superior quality generally, using for the high-class goods Australian wool, either pure or mixed with Indian wool.

The year 1905 was a record one both as regards the quantity and value of the woollen goods produced. In 1906 and 1907, owing to the high price of wool, there was a considerable shrinkage in production; a distinct recovery was revealed by the statistics for 1908 and 1909, and in 1910 the output was only 0.6 per cent less than in 1905, and the value was greater than in that year. The quantity of woollen goods imported into India is, however, very much greater than the production of the Indian mills. Piece goods and shawls from the United Kingdom and Germany make up the bulk of the imports. The value of the woollen goods imported in 1910 was \$9,700,000, and of the production of Indian mills \$1,570,000. There are, in various places in India, factories for weaving carpets and rugs and of pattu and pashmina, but though these industries are in the aggregate extensive, they are individually small, the weaving being done on hand looms.

The following statement gives detailed particulars of the woollen industry for the years 1908, 1909, and 1910:

	1908	1909	1910
Mills at work.....number.....	5	5	5
Nominal capital employed.....	\$14,800,000	\$14,800,000	\$16,800,000
Persons employed.....number.....	3,511	3,392	3,442
Looms.....do.....	786	809	808
Spindles.....do.....	29,221	30,421	31,205
Production.....pounds.....	3,415,763	3,954,739	4,101,708
.....(value.....)	\$14,600,000	\$14,000,000	\$15,700,000

The exports of woollen goods from India consist almost entirely of carpets and rugs, of which about three-fourths go to the United Kingdom, and the greater part of the remainder to the United States. The values of Indian carpets and rugs exported during 1908, 1909, and 1910 were \$7,700,000, \$6,870,000, and \$8,000,000, respectively.

COTTON GROWING IN GREECE.

[Athens correspondence of London Financial Times.]

The Minister of Agriculture, Commerce and Industry of Greece states that there are under cotton cultivation in Greece between 3,500 and 4,000 stremmas (stremma = 0.2471 acre) of Egyptian cotton, in addition to 4,000 stremmas under cultivation on the estate of M. G. Christako-Zographos in Thessaly. The native cotton, short staple, is equal to good middling American, but although there is a considerable quantity of this grown in Greece, the aggregate is not taken into consideration in the above figures. The result of the first experiment having proved eminently satisfactory, further cultivation is to be undertaken. At present the demand for Egyptian seed represents the plantation of over 20,000 stremmas, and this is expected to increase.

At present prices Greek (Egyptian) cotton sells upon the Liverpool and Alexandria markets at 20 to 23 cents, and the extra quality up to 25 cents per pound. Upon this basis the seed so far sold to planters in Greece represents the production of a value of from \$500,000 to \$600,000. It is fully anticipated that in two or three years' time 250,000 acres of cotton lands will be under cultivation, which would yield, at the present low price and that received for the last two or three crops, a return of about \$15,000,000.

Borax production.—The enameling industry consumes about one-half of the total borax production of the United States, which, according to the Geological Survey, amounted in 1910 to 42,357 short tons, valued at \$1,201,842.

OPPORTUNITIES IN GREEK TRADE.

[From Consul Arthur B. Cooke, Patras.]

The letters received at this consulate from American firms seem to indicate a growing, but sometimes misdirected, interest in this market on the part of American exporters. The Patras consular district includes the Peloponnesus, the Ionian Islands, and part of the mainland of Greece, and its interests are primarily agricultural. The largest city is Patras, the metropolis of the Peloponnesus, with a population of 40,000. Improved highways are almost entirely lacking and communication is by water or by narrow-gauge railway to the interior. It is, therefore, clearly a loss of time for American exporters to attempt to develop a market here for such things as automobiles and bicycles.

Cotton textiles are in great demand here, being used by all classes. At present they are obtained chiefly from England and Italy. Agricultural implements, such as hoes, picks, plows, shovels, harrows, and other tools commonly used by the tenant farmer class, also form a large and growing part of the imports. There is slight demand for agricultural machinery, owing to the absence of large landed estates. The finer grades of calf and kid leathers find a ready sale here, being obtained from Germany, France, and the United States. Iron furniture, such as beds, is in active demand and the American article could get a foothold here if properly presented. At present England furnishes all of this class of imports. Hardware, including firearms, also finds a good sale here. A large amount of earthen and enamel ware, especially the cheaper grades, is taken by this market, the supply coming from Austria, Germany, England, and Italy. Staple groceries and manufactured foodstuffs are imported in considerable quantities.

Automobiles, bicycles, pianos, and piano players would find no appreciable demand here, nor could such a demand be easily created. The high tariff imposed practically prohibits the importation of wood furniture and of all but the finest grades of shoes. Heavy machinery finds little demand, as there is not much manufacturing on a large scale carried on in this district.

The chief articles of American origin on the local market are firearms and ammunition, sewing machines (American firm, but apparently made in Europe), fine kid and calf leather, pumps, petroleum, and cotton lint. American electric cars are used on the Patras tram line. Wherever American goods have been introduced here, they have met with favor and have tended to hold their own against competition.

AMERICAN IDEALS IN CHINA.

As noted in this journal for April 15, Mr. Robert Dollar has just carried to China an invitation by the Associated Chambers of Commerce of the Pacific Coast for Chinese business associations to send a delegation on an American tour. Mr. Dollar noted everywhere a deep interest in American institutions and policies. Following is a paragraph from his report:

The life of Washington has been published in Chinese, and is sold as fast as it comes from the press. I met many old men who could not speak a word of English, but who were quite familiar with the life of Washington and what he did to establish our Republic, a duplicate of which they are determined to get for China.

TRADE OPENINGS IN ASIA MINOR.

[From Consul General George Horton, Smyrna.]

Motor Boat Possibilities.

There are only about a dozen motor boats in use at Smyrna, although the large and beautiful harbor is nearly always quiet and safe in summer and affords a pleasant refuge from the heat. Excursions to several shore and island resorts near here are also popular. A small English motor boat has made the round trip to Mitylene, which is seven or eight hours from Smyrna by steamer.

American motor boats have received an unfortunate setback from the inability of some local importers to properly set up American boats which they imported knocked down. Competitors have taken full advantage of the fact that American motor boats are to be seen in tow in Smyrna Bay, and much of the trade has passed into the hands of British makers, although their boats cost twice as much as those of American make. Steel boats are not suitable for this harbor, the dory whaleboat being the only style which should be used. Such boats should be at least 23 feet long. Some frail lake boats have been sent to Smyrna by American houses, only to lie around uselessly and injure the American motor-boat trade.

Trade in Neckwear.

For several years the imports of neckwear have been increasing at Smyrna, where their sale is extensive. The following details are from the Near East:

The principal suppliers of neckwear are Italy, Austria, Germany, and Great Britain. The imports annually amount to 125,000 to 140,000 francs (franc=\$0.193). Italy, before the war, sold neckwear to Smyrna, amounting to 60,000 francs a year, at the following prices: Knots, 2.25 to 3.50 francs per dozen; scarfs of average length and breadth, 5 to 8 francs per dozen; scarfs 1 meter long and wide, 8 to 12 francs per dozen. The other countries supply Smyrna with squares, regates, knots, and plastrons. The prices per dozen for these range as follows: Squares, 7 to 30 francs; knots, 3 to 9 francs; regates, 4 to 20 francs. Austria delivers the best qualities of scarfs of all kinds at 10 to 18 crowns (crown=\$0.203) per dozen, and Germany sells second and ordinary qualities at 5 to 7 francs a dozen. England and France share in the sale of the finer grades of ties. Foreign ties are packed in cardboard boxes holding 1 or 1½ dozen, which are either packed in cases or sent by parcels post. There is also a limited trade in made-up ties, handled by Syrian venders. The native manufacturers have not yet made sufficient progress to compete with foreign makes, their articles are of inferior quality, and they supply only an insignificant portion of the trade.

Credit for three or four months is usually given on orders placed in France and England, while Italy, Austria, and Germany grant a credit of six months from date of invoice. Some buyers insist on paying cash for a discount of 5 per cent. As the houses importing ties into Smyrna are numerous, and the majority require long credit, reliable information as to their financial standing should be obtained before treating with them.

Consular Trade Conferences.

Consul General Leo Allen Bergholz, of Canton, China, advises that he expected to arrive in San Francisco, Cal., on April 11 on a visit to the United States on leave of absence. Arrangements have been made by the consul general to meet members of the chambers of commerce at San Francisco and Los Angeles, and in the event that visits are made to other trade centers of the country he will give due notice to the respective chambers of commerce. Most of Mr. Bergholz's time while in the United States will be spent at Burlington, Vt., where he may be addressed on the subject of possible trade conferences.

NEW CAN-COVERING MACHINE.

[From Consul P. Emerson Taylor, Stavanger, Norway.]

Application has been made for a patent on a new machine for folding and sealing the lids on cans, recently invented by a Stavanger mechanic. The machine differs from the ordinary lid-folding machines in that it contains a metal plate with openings for four sardine or other fish cans. The cans, with lids laid on, are placed in these openings and the plate is run through the machine, which automatically fastens and seals the lids on the cans. The only handwork necessary is the placing of the lid in position on the can and putting the can in the opening in the metal plate, which can be done by a boy, while a man of some skill and experience is required to operate the old machines, in which the can is placed in proper position in the machine and a lever pulled each time the lid is pressed on the can and sealed. The new machines, like the old ones, will be operated by electric power.

In addition to dispensing with skilled labor in the lid-sealing process, it is claimed that the new machine will cover 2,000 to 3,000 more cans in a day than the old machine operated by an experienced workman. The capacity of the machines now in use is about 6,000 cans per 10-hour day, while that of the new machine is 8,500 to 9,000 cans a day.

The invention is not yet perfected, for at present the machine covers only cans of uniform size; but the inventor intends to adapt it to all sizes of cans used in the fish canneries of the city. The inventor claims that the new machine is less complicated and more easily adjusted and repaired than the old machines. His invention is now being tried in one of the local canneries.

Lectures on New Zealand.

Mr. William Lock, of Nelson, New Zealand, is planning to visit the United States in September, 1912, and writes to the Bureau of Manufactures, expressing a willingness to lecture on New Zealand free of charge, before any responsible societies who may wish his services. Mr. Lock states that he received a number of requests for lectures while in the United States in 1908 which he could not fill, owing to lack of time, but that he expects to spend about two months in this country on his coming trip. He is a member of the Board of Education and the Chamber of Commerce of Nelson, and will be prepared to lecture on the educational systems, resources, people, legislation, scenery, or commercial conditions in New Zealand. Requests for lectures must reach him before his departure from New Zealand.

Decreased Consumption of Cottonseed Oil in Syria.

Consul General W. Stanley Hollis, of Beirut, reports that low prices resulting from the large and good crops of olives gathered during the last harvesting have diminished the consumption of cottonseed oil from Egypt and the United States. Prospects for the coming crops of Beirut and Lebanon olives are also assuring, though two successive years of excellent crops are practically unknown.

URUGUAYAN HARBOR FACILITIES.

[From American Minister Nicolay A. Grevstad, Montevideo.]

The condition of the port of Montevideo lately has caused considerable discussion among public men, in shipping circles, and in the press. As is generally known, the port is the only deep-water harbor in Uruguay. There is a harbor for small vessels at Punta del Este, Department of Maldonado, and the Government is now building a harbor at Paloma, Cabo de Santa Maria, Department of Rocha, where it is expected that 18 feet of water can be obtained and maintained. Neither Punta del Este nor Paloma has railroad connections. West of Montevideo there is a shallow harbor at Colonia, Department of Colonia, and on the Uruguay River are fairly good river harbors at Paysandu, Salto, and Fray Bentos.

The central traffic point of the railroads of the country is Montevideo, whence they spread out in all directions—east, northeast, north, and northwest. As the bulk of exports and imports pass through the port of Montevideo, which at present is practically the only outlet and inlet for the foreign commerce of Uruguay, the paramount importance of this harbor is self-evident. Vast works have been undertaken and a great deal of money has been expended, in all some \$18,000,000, in order to provide deep water and good shelter for large ocean-going vessels.

It is evident, however, that the harbor does not meet the growing needs of business. The maximum depth of 25½ feet, even if maintained, is insufficient in the face of the rapidly increasing draft of trans-Atlantic steamers being constructed for the River Plate trade. But the real maximum depth does not exceed 24½ feet, on account of gradual deposits of sand and silt due to insufficient dredging.

LONDON ELECTRIC SUPPLY COMPANIES.

[From the Economist, London.]

Up to the present it is hard to find an industrial group that has been less affected by the dislocation of the coal trade than the companies supplying electricity in London. They have always carried substantial coal reserves, and, being forewarned of the present crisis, were able to lay in larger stocks than usual. Hence they were not obliged to restrict the supply of power or light to their consumers.

The strike will certainly not result in cheaper coal, and if coal prices rise slightly the steam power user will find his working costs greater, while it is safe to say that the price of electricity will not be raised. Even if the coal bills of the electric power companies are larger in the future, nearly all the rest of their expenses are fixed charges. Electricity has been growing in favor for power and has many advantages over gas for lighting. The rapid growth in the use of electricity in London is shown by the increase in the output of the nine leading companies from 105,754,000 Board of Trade units sold in 1906 to 154,835,000 in 1911. The increase in 1911 was greater than in any previous year in this period. Part of this increase may be ascribed to the electrification of the Brighton Railways suburban system.

The rate of growth in capital in the last few years has been much slower than the increase in output, the total capital of the nine companies being \$51,930,188 in 1906 and \$56,444,173 in 1911. Owing to the competition of the gas companies and the cheapening of contracts, the price of electricity has slowly fallen, so that the gross revenue has only risen from \$6,511,688 in 1906 to \$7,458,159 in 1911.

The net revenues, after the deduction of depreciation charges but not debenture or other interest, amounted to \$2,758,697 in 1909 and \$2,863,035 in 1911, showing a rise of 6.2 per cent in the net compared with 6.6 per cent in the gross, showing that the companies are not working with so big a percentage of profit as they were three years ago. Considering that their combined output has risen 16 per cent in the same time, this keeping of the ratio of working expenses to gross receipts practically level represents an achievement in economy.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 591. Forage, etc.**—Bids are invited until 2 p. m., April 26, 1912, by the Agricultural Department for furnishing and delivering f. o. b. Beltsville, Md., in such quantities and at such times as the department may require, the following items: One carload (about 30,000 pounds) of prime white oats, re-cleaned; 1 carload (about 40,000 pounds) of wheat bran; 2 carloads (40,000 to 48,000 pounds) of prime long timothy hay, baled; 2 carloads of prime red clover hay; 2 carloads of prime alfalfa hay; 1 carload (about 40,000 pounds) of old-process linseed-oil cake, pea size. Further information may be obtained by addressing the Division of Accounts and Disbursements, Agricultural Department, Washington, D. C.
- No. 592. Building construction.**—Sealed proposals will be received at the office of the United States Life-Saving Service, Treasury Department, Washington, D. C., until 2 p. m., May 1, 1912, for the construction of a new building at the Moriches Life-Saving Station, Long Island, N. Y. Specifications and drawings, etc., can be obtained upon application to the keeper of the station named; to the Superintendent of the Fourth Life-Saving District, Bay Shore, N. Y.; the superintendents of Construction of Life-Saving Stations, 379 Washington Street, New York; or to the office at Washington.
- No. 593. Dynamite, blasting caps, etc.**—Sealed proposals, in triplicate, will be received at the office of the General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10.30 a. m., May 6, 1912, for furnishing dynamite in accordance with estimate for the period ending December 31, 1912 (schedule 700); also for furnishing blasting caps, detonators, safety fuse, insulating tape, and lead wire for the period ending June 30, 1913 (schedule 701).
- No. 594. Sheet metal "tote" boxes.**—Sealed proposals will be received at the office of the Purchasing Agent, Post Office Department, Washington, D. C., until 2 p. m., April 25, 1912, for furnishing and delivering at and within the doors of the mail-lock shop at Washington, D. C., 550 sheet-metal "tote" boxes 23 inches long, 12 inches wide, 6 inches deep, and of No. 16 gauge steel.
- No. 595. Dredging.**—Sealed proposals will be received at the United States Engineer's Office, Duluth, Minn., until May 9, 1912, for dredging at Superior Entry, Duluth-Superior Harbor. Information on application to Francis R. Shunk, Lieutenant Colonel, Engineers.
- No. 596. Internal-combustion engine plant.**—Sealed proposals will be received at the United States Engineer's Office, New London, Conn., until 2 p. m., June 7, 1912, for furnishing and installing an internal-combustion engine plant at El Fraile Island, Philippine Islands. Information on application to A. E. Waldron, Captain, Engineers.
- No. 597. Glass.**—Sealed proposals will be received at the office of Superintendent of Prisons, Department of Justice, Washington, D. C., until 10 a. m., May 15, 1912, for glass required for the hospital building of the United States penitentiary at Leavenworth, Kans., in accordance with specifications, copies of which may be obtained at the Washington office.
- No. 598. Steel racks.**—Sealed proposals will be received at the office of the Purchasing Agent, Post Office Department, Washington, D. C., until 2 p. m., April 25, 1912, for furnishing and delivering at and within the doors of the mail-lock shop, Washington, D. C., steel racks with backs.

MINERAL PRODUCTION OF QUEBEC.

[From Consul G. Willrich, Quebec, Canada.]

Based on data direct from producers, the provincial government finds that the total value of the various mineral products of this Province for 1911 reached \$8,567,143, as against \$7,323,281 in 1910. The products showing the greatest increase are limestone, with about \$500,000; bricks, \$230,000; asbestos, \$300,000. Sand production was valued at \$114,500 in 1911. Asbestos undoubtedly will continue to hold first rank despite overcapitalization and overproduction, which have hampered the sound development of this industry.

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THE FRUIT INDUSTRY IN JAPAN.

[From Consul General Thomas Sammons, Yokohama.]

Varieties of Fruit—Market System.

The principal fruits marketed in Japan are persimmons, mikan (mandarins or Japanese oranges), pears, apples, peaches, grapes, strawberries, apricots, watermelons, melons, figs, loquats, walnuts, chestnuts, bananas, and pineapples. Except bananas and pineapples, all of these fruits are grown in Japan.

Buyers or local agents of large commission houses in various market centers collect and purchase fruits in the growing districts. The fruit is crated or boxed by them and sent to the commission houses, which offer them at a regularly established fruit exchange market, where daily quotations are practically determined. Only the greengrocers or regular fruit dealers have the privilege of buying in wholesale quantities at the exchange.

It is customary in Japan for grocers to send out their clerks to their regular customers to note their orders in the morning and make deliveries in the afternoon. Housewives seldom go shopping for vegetables or fruits.

Packing—Retail Prices.

Hard persimmons are put up in barrels; soft ones are crated. Native oranges are invariably put up in small boxes measuring about 13 by 10 by 10 inches, and containing 70 to 160 or 170 oranges, according to size. Pears are carefully wrapped in paper and boxed. Peaches are crated. Apples are put up in boxes, usually being packed in sawdust. The size of apple boxes is practically similar to the cases containing two 5-gallon petroleum cans. Often the petroleum cases from America are turned into apple cases.

The average retail prices in Yokohama are:

Persimmons, fresh and large, 1.5 to 3 cents each; medium, 1 to 1.25 cents each; small, 2 to 6 cents per dozen.

Mikan, best grade, 45 cents per box; medium grade, 27½ cents per box.

Oranges, imported from America, 72 cents to \$1.50 per dozen; Japanese navel oranges, 24 cents to 75 cents per dozen. The so-called Japanese navel oranges are grown in small quantities in Japan from original cuttings imported from abroad. This fruit does not grow well in Japan.

Pears, one-half cent to 5 cents each; stored pears in winter are sold at 5 to 15 cents each.

Apples (Japanese), 1 to 3 cents each. There are scarcely any good American apples in the Japanese markets.

Peaches, 1½ to 4 cents each.

Chestnuts, 35 to 40 cents per gallon.

Bananas, Hawaiian, 15 to 20 cents per pound; Hongkong, 12½ to 15 cents per pound; Bonin Island, 6 to 10 cents per pound.

Apples Popular in Japan.

The history of Japan-grown apples, as developed in the principal cities, dates back only a few years. Young trees were imported from America and planted in Hokkaido (northern island) and in the northern Provinces of Akita, Aomori, and Yamagata. The experiment proved very successful, and about 12 years ago northern apples began to supply Tokyo and other large city markets in Japan. The people in general, however, have not yet learned to use the apple or any other fruit in their common diet, its principal use being for afternoon tea service or for children, usually to be eaten between meals. Apple jam and other forms of cooked apples are almost unknown among ordinary Japanese families.

As a rule, apple growing is considered as an incidental or indifferent source of income among Japanese farmers. No statistics as to acreage, number of trees planted per acre, varieties, average yield, irrigation, etc., are available. The latest publication by the Imperial Japanese Department of Agriculture and Commerce gives the following:

Year.	Number of trees.	Yield in pounds.
1907.....	2,151,344	55,868,000
1908.....	2,484,017	43,228,208
1909.....	2,279,362	52,044,968

The total population of Japan, exclusive of Formosa, Sakhalin, Chosen (Korea), and other distant possessions, is upwards of 52,600,000, the average apple production therefore being about 1 pound per capita.

Japan Exporting Apples—Fruit Growers' Associations.

Japan imports few apples; but its exports to foreign countries (Asiatic Russia principally, also China, Hongkong, and the Philippines) are annually increasing, as shown in the following table:

Year.	Pounds.	Value.
1909.....	4,471,381	\$142,020
1910.....	5,533,192	167,435
1911, first 10 months.....	8,071,532	222,510

Apples are cheapest in September and October in Japan. After December there is steady increase of about 20 per cent. The wholesale quotations in February, 1912, ranged between \$2.50 to \$3.50 per 100 pounds net.

In the apple-producing districts, each county or village generally has a fruit growers' guild, which regulates the standard size of cases, method of packing, standard of quality for export, etc. The guild sometimes specifies the price, and if any member is found underselling the specified price he is subjected to heavy fines or punishment. The guild is a semiofficial institution, and when once organized those engaged in the industry in the district are required to join.

American Apples.

The total imports into Japan of fresh fruit and nuts in 1909 and 1910 were less than \$24,000 a year. There was a slight increase in 1911, and it is anticipated that the total will reach a little over \$30,000 for that year. Chinese nuts and fruits, Hawaiian pineapples and bananas, and American oranges are among the imported fruits mentioned, but it appears that very few American apples are now brought in. Moreover, with a tariff of approximately \$1.50 per 100 pounds on this fruit, it seems that there are serious obstacles to overcome in placing American apples on the Japanese market.

A large part of the American apples that are imported into Japan are consumed by the foreign communities. [A list of dealers in Yokohama, supplying the foreign trade, may be obtained from the Bureau of Manufactures.]

[From Consul George N. West, Kobe.]

Oranges Grown in Southern Japan.

The Oonshiu, or Satsuma, orange is grown in the southern and southeastern parts of Japan, the northern prefectures and western coast being too cold. Oranges are grown chiefly at an altitude of 600 to 2,000 feet above sea level. A southerly exposure is best for the tree, and the best soil is a sandy loam, with gravel about 3 feet from the surface. The land should be hilly and rolling. The most favorable temperature ranges from 36° to 95° F., with an average of 65°. It is uncertain what degree of cold the Satsuma orange can stand without being killed, but at Wakayama, with a temperature of 22°, no trees were reported killed. Strong gales, especially sea winds in summer, cause the leaves to wither and are generally considered worse for the trees than cold weather. In the more northerly districts where oranges are grown the trees are sometimes covered with coarse matting in winter.

It is impossible to state accurately the age that Oonshiu oranges will attain, as there are no records of the dates of planting of the very old trees. There is a tree about 150 years old in Kamomura, Wakayama Prefecture, whose trunk is over 4 feet in circumference near the roots. A tree at Takatamura, Kumamoto Prefecture, is said to be the oldest in Japan. Up to 10 years ago its branches had a spread of 60 feet radius in every direction, but they are now reduced to an east and west diameter of 27 feet and a north to south measurement of 108 feet. Roots have grown from the branches of this plant, which lie on the ground.

Methods of Cultivation.

Oranges were formerly grafted on the Yudsu (*Citrus aurantium*), but now the Kikoku (*Citrus fusca*), or *Citrus trifoliata*, which is much hardier, is widely used. Grafting on trees is commonly done without removing them from the ground, but sometimes the trees are dug up, grafted, and transplanted. Budding is a new system in Japan, but it is gradually being widely adopted.

The Oonshiu orange tree usually grows 10 or 12 feet high, covering a space 22 or 23 feet in diameter. Its branches close to the ground, and, not being pruned, the weight of the fruit causes many branches to lie on the ground. The Japanese prefer a low tree, as the fruit can be picked without ladders, and the branches keep the ground cooler and more moist than it would be if exposed to the sun.

COTTON-TESTING HOUSE AT SHANGHAI.

[From Vice Consul General W. Roderick Dorsey, Shanghai, China.]

Ever since the establishment of modern cotton mills at Shanghai and the beginning of the exportation of the raw fiber to foreign countries both mill owner and exporter had been in the power of the native middlemen who operated between them and the farmer.

These middlemen are resident mostly at Nantao, a suburb of the walled city and, through their agents, who go into the cotton-growing areas, buy up the whole of a farmer's crop, paying part of the purchase price in advance, but always keeping him in want of money and so under their control. Therefore, when these agents requested the farmers to add water to their product, they were obliged to do so to obtain the balance of their money. From this practice large profits resulted to the middlemen, who sold water and cotton for the same price. The evil grew with its success until 25 to 30 per cent of moisture came to be imposed upon mill owner and exporter, operating to their great disadvantage.

To overcome this excessive moisture, foreign mill owners set up testing ovens of their own, which secured betterment to individuals but none to the general market. The Japanese established joint testing houses which did not prove profitable. This was a very serious matter for them, for, besides owning mills locally, Japanese interests took 75 or 80 per cent of all the cotton exported.

Cotton Antiadulteration Association—Testing-House Staff.

Seeing the better condition of the staple which was being used in other mills, the Japanese firms approached the foreigners to secure their cooperation in a scheme for the betterment of the open cotton market. Certain influential firms took favorably to the idea, a meeting was called, and a Cotton Antiadulteration Association was formed to prevent, so far as possible, the adulteration of cotton by water and other substances, in conformity with ordinances to be issued by the Chinese Government for that purpose. At this meeting regulations governing the association were adopted.

The cotton-testing house provided for in the regulations was duly established, much aid being rendered by the local chambers of commerce and the consular and diplomatic bodies in securing support from the local Chinese officials and of the Peking Government. Through Peking the cooperation of the maritime customs was assured, without which it would have been impossible to enforce compliance with the rules and regulations promulgated for the control of the cotton-testing house.

The staff as constituted at present includes a manager, who is detached from the customs service, his salary (\$4,750) being refunded to the commissioner of customs by the association; 1 secretary (Japanese), at \$900; 4 testers—1 foreign at \$1,200, 1 Japanese at \$750, and 2 Chinese at \$120 each; 7 foreign supervisors and samplers, \$900; 4 Japanese supervisors, \$750; 4 Japanese samplers, \$600; 18 Chinese assistants, \$72; 1 Chinese office boy, \$96; 2 Chinese coolies, \$48 each.

Location—Sampling—Type of Oven.

The main testing house is located at 41 Kiangse Road, in the heart of the International Settlement. A substation is maintained in the principal cotton-mill district, at 1358 Yangtzepoo Road, and is in

charge of two foreign and two Japanese samplers and supervisors, with a staff of native coolies paid on the same scale as those at the main establishment. The services of the house are available to all dealers in cotton whether members of the association or not, and the method for securing a certificate by cotton exporters is as follows:

When the application for test is received it is given a number and samplers are sent to the place where the cargo is stored, who, first verifying the marks on the bales with those in the request, proceed to extract samples haphazard through the consignment, 5 from every 100 bales. These samples are placed in round tins of the ordinary 2-pound size and a tag, marked with the application number, attached to each. These tins are in turn deposited in a canvas bag, which is sealed and sent to the testing house for treatment in the ovens.

These ovens, of which there are 60 at present, are made from an English design. They are about 1 foot wide by 1 foot long by $1\frac{1}{2}$ feet high and are constructed of sheet iron with an inner lining of tin, between which are about $1\frac{1}{2}$ inches of sand and alabaster to retain the heat, which is generated by gas, four jets to each oven. The temperature during the testing process ranges from 212° to 225° F.

Testing Methods.

The tester weighs out 50 grams of cotton from each tin and places it on shallow trays. These are placed in the oven on tin cylinders. The oven is tightly closed, but there is an aperture at the top to allow the moisture to escape and to permit the insertion of a thermometer. The cotton is left in the ovens for a full hour, when, if the thermometer indication is satisfactory, it is removed and results figured out. The time the baking began and the time completed are both recorded and the cotton is again weighed, its dry weight noted on the label, also the loss in weight, from which is found the percentage of moisture in the bale the sample represents. (The scales on which all weighing is done are metric and weigh down to 5 milligrams.)

To illustrate: The weight of cotton and moisture placed in the oven was 50 grams; the weight of cotton after test is, say, 42.72 grams, showing a loss of 7.28 grams by moisture, which is 14.56 per cent, or just a trifle below the admitted figure. Now as samples have been extracted casually 5 from every 100 bales, the standard of the consignment is arrived at by taking the average of all the samples, thus: Tin No. 1 shows 14.56 per cent of moisture; tin No. 2, 15.10 per cent; No. 3, 13.80 per cent; No. 4, 14.24 per cent; No. 5, 14.60 per cent; the average shows 14.46 per cent of moisture.

The certificate for that 100 bales would be indorsed "below standard," but if the average loss from moisture had been more than 15 per cent none would be issued.

Fees—Exchange Test Certificate—Extraneous Matter.

This certificate is issued only after fees are paid in accordance with the tariff in force at the testing house for the time being. The tariff is notified to the public in circular form; the fees are made up on a memorandum and a receipt given by the treasurer of the association on the same form, which is exchanged for the cotton-test certificate.

After the test has been made it often happens that dealers desire to have cotton repacked for export, and to secure a permit to pass same through the customs a further application must be made to the

testing house. If there is no reason to doubt the identity of the cotton with that called for in the original certificate, an exchange test certificate will be issued.

The fee schedule originally adopted in article 4 of the rules and regulations governing the testing house does not, with the present restricted volume of business, provide sufficient funds for the maintenance of the establishment. Therefore, at a special meeting of the Cotton Antiadulteration Association the committee was empowered to regulate fees to suit the demand, and in accordance therewith did, on February 1, 1912, double the scale; but this is only a temporary measure and the lower tariff will be reverted to as soon as feasible.

Seeds and other extraneous matter are picked out of a certain quantity of cotton by hand and weighed, and the percentage of seeds or extraneous matter to cotton worked out proportionally. There are two expert testers at the house who at sight can judge the percentage, and unless the applicant requests it or the testers wish to satisfy themselves, no picking and weighing is done.

Opposition Encountered.

The testing house was put in operation at the beginning of the 1911-12 cotton season. As anticipated, opposition was met with from the middlemen. Agents brought cotton to market, and in an attempt to break up the reform took it away again when they found it could not be moved except through the testing house, only to send it back when convinced of the permanency of the system. The mill owner would not accept uncertified cotton and the exporter, however willing to take advantage of the situation, was estopped by the determination of the customs authorities to issue no permit for the exportation of cotton that had no certificate from the testing house. There is no question that the standard of Shanghai cotton has improved, and the operations of the testing house give great satisfaction to all who are interested in real as opposed to fictitious values in the staple.

Owing to short crops and a more or less restricted movement because of the disturbed conditions in China, less cotton passed through the testing house than was anticipated, but 10,000 to 15,000 bales have been handled in one day without straining the capacity of the equipment. It is intended later to increase the ovens to 100, when the demand that will certainly occur in good crop years can be met without delay to the merchants.

It is believed that a portion of the advanced price for cotton in China in the early season was due to the effort of the middleman to recoup the loss he was compelled to stand from reduction of moisture. The scale of testing fees is such that it is thought it can not of itself affect the market to any appreciable degree.

Membership—Other Testing Houses.

As at present constituted the Cotton Antiadulteration Association has 24 members who have subscribed to the guaranty fund but who receive no special benefits, except a participation in a distribution of possible assets when the association is dissolved. While article 2 of the rules and regulations of the Shanghai cotton-testing house might be construed as limiting the use of the house to members of the association, such is not the case. Its usefulness and scope have been greatly enhanced by the practice of permitting all dealers to have their cotton tested upon paying the fee, and with the stringent

application of the customs export regulation it would seem that at Shanghai, at least, a way has been found to effectively prevent the abuse of moisture allowances in raw cotton.

There is no other similar establishment in China at present, but it is thought that the cotton exporting centers of Tientsin and Hankow will follow suit.

[The following documents accompanying Vice Consul General Dorsey's report will be loaned to interested firms by the Bureau of Manufactures: Rules and regulations of the Cotton Antiadulteration Association of Shanghai; memorandum of proposed arrangement by which the Chinese Maritime Customs will cooperate in measures to prevent the watering of cotton; method for securing a certificate by cotton exporters and by local mills; application for test; cotton sampling notice; sample tin label; provisional instructions for samplers and supervisors; scale of charges; fee memorandum and receipt; cotton-test certificate; application blank for new certificate for repacked cotton; exchange test certificate for repacked cotton. Reference to the Cotton Antiadulteration Association was made in Daily Consular and Trade Reports on July 28 and December 6, and an article relative to the Shanghai cotton-testing house was also published on November 15, 1911.]

TOMATO GROWING IN CANADA.

[From Consul Felix S. S. Johnson, Kingston, Ontario.]

The production of early tomatoes has become prominent in the more favored parts of Ontario Province, including the Niagara Peninsula, the Leamington district in Essex County, and the neighborhood of Toronto, and it is carried on to a lesser extent throughout the tomato-growing sections of the Province. The total shipments from the Leamington district, exclusive of those consigned to Winnipeg, from July 1 to August 12, 1911, amounted to 40,000 baskets. No reliable information is available of the shipments from the other districts. Most of the early tomatoes are marketed through Toronto. The Essex growers claim that the western trade has not proved satisfactory, as the first shipments by express are expensive and come in competition with the American product, while later the cheaper shipments by freight compete with the St. Catharines tomatoes. It is also said that the fruit is not handled to the best advantage in Winnipeg, the jobber taking too large a share of the profits.

Most of the seed comes from the United States, the price running from \$1 to \$10 per pound, the general price being about \$3. The duty on seed imported from the United States is 10 per cent ad valorem, when importation is in packages weighing over 1 pound, and 25 per cent ad valorem when in packages weighing 1 pound or less. In 1911 Canada imported fresh tomatoes as follows: From the United States, 203,349 bushels, valued at \$256,127; from Cuba, 480 bushels, value \$770; from the United Kingdom, 743 bushels, value \$996.

Armadillos are plentiful in Borneo, Consul Orlando H. Baker, of Sandakan, stating that many of the skins find their way to market, over \$1,500 worth being annually exported.

THE ITALIAN FRUIT MARKET.

[From Consul General James A. Smith, Genoa.]

The principal fruits marketed in Italy are: Oranges, from December to May; mandarins, December to March; cherries, strawberries, and medlars, in May and June; peaches, apricots, prunes, and green-gages, July to October; fresh figs, August to November; grapes, October to December. Apples, pears, walnuts, filberts, almonds, and bananas are marketed all the year, the bananas being imported mainly from the Canary Islands.

All of these fruits, with the exception of bananas, are grown locally and are customarily sold by weight. Fruits which are liable to quick deterioration are gathered in the evening and sent in baskets by wagons to the city market during the night, where the sale to brokers usually begins at 3 a. m. and by the brokers to retailers at 6 a. m. Certain qualities of apples and pears consumed during the winter are packed in September and October.

Retail Prices—Apples.

Retail prices here, converted into American currency, average about as follows, a kilo being equal to 2.2046 pounds:

Kinds of fruit.	Price, in cents.	Kinds of fruit.	Price, in cents.
Apples.....kilo.....	7.72 - 11.58	Medlars.....kilo.....	7.72 - 9.65
Apricots.....do.....	15.44 - 19.3	Oranges.....each.....	.965 - 1.544
Cherries.....do.....	7.72 - 9.65	Peaches.....kilo.....	9.65 - 15.44
Figs.....dozen.....	5.79 - 7.72	Pears, summer.....do.....	7.72 - 11.58
Grapes.....kilo.....	7.72 - 11.58	Pears, winter.....do.....	15.44 - 19.3
Green gages.....do.....	15.44 - 19.3	Prunes.....do.....	15.44 - 19.3
Mandarins.....each.....	.579 - 1.158	Strawberries.....do.....	28.95 - 33.775

The apple is cultivated locally and is a popular fruit. It is generally grown on the slopes of low hills, together with other fruits, vegetables, and grain. The land is sometimes irrigated, but not so much for the benefit of the apple trees as for other soil products. No data are at hand as to the yield per acre. The chief varieties here are the Mele Carle, Mele Carpendu, Mele Renette, Mele Rosse, Mele Pomelle, and Mele Limoncine. The principal places of production in northern Italy are at Albenga, Province of Porto Maurizio; Mondovi, Cuneo, and Pinerolo, in the Province of Cuneo; Aulla, Province of Massa-Carrara; and Padua. Table apples are exported in baskets to France, Germany, Switzerland, and Austria; apples for cider making are also exported in bulk to those countries in carload lots. Wholesale export prices per 100 kilos (220.46 pounds) are: Table apples, \$3 to \$5; cider apples, as low as \$1.

Imports, Exports, and Duty.

Apples are imported during the winter from the United States and Canada and during the spring from Australia, but practically all of these are for supplying ships calling at this port, the quantity for home consumption being insignificant. No other fresh fruit is imported from the United States. For American, Canadian, and Australian apples the wholesale price here is \$2 to \$3 per case of 20 kilos (44.092 pounds).

Official statistics show that Italy imports annually \$125,000 to \$225,000 worth of fruits "not specially named," among which would be apples and pears. The actual importation of apples can not,

therefore, be given, but it is not large. As opposed to this the exports of apples and pears, mainly to Germany, France, Switzerland, and Austria, are important. In 1909 these shipments were valued at more than \$6,000,000; in 1910, \$2,400,000; and in 1911, \$5,700,000.

The Wenatchee apple is unknown in Italy, but it would perhaps be possible to develop a market here if the fruit could be delivered from November or early December until May. To build up this trade the best method would be through a general representative in Genoa, who would at first introduce the fruit locally, and later on, if successful here, develop this business in other Italian markets. The import duty on fresh fruits is 1 lira (19.3 cents) per 100 kilos. Genoa's total annual consumption of fresh apples is about 150 carloads of 10 tons each.

INTENSIVE FARMING IN THE CANARY ISLANDS.

[From Consul William W. Kitchen, Tenerife.]

The truck farmers of the Canary Islands engage in intensive farming almost exclusively, as the farms average but 2 to 5 acres in size, rarely more. The largest farm in the islands is about 140 fanegadas (the fanegada varies in the different islands, being usually a little less than 1 acre). Plowing is done with primitive plows, consisting of a rough-hewn pole or tongue to which is fastened an iron-pointed stick, drawn by oxen. These plows are not so easily injured by the large loose rocks below the surface of the soil as steel blades would be, and the low cost of labor, about 50 cents American a day, makes the demand for a modern time-saving implement slight. The results obtained with this method of cultivation are excellent, and the appearance of a newly plowed finca (farm) is equal to that of the best English and European market gardens.

The irrigation, which the average yearly rainfall of 15 inches makes imperative, is supplied on these miniature farms by the use of hand watering cans. The larger farms have cement-lined stone reservoirs, some of which have a capacity of several thousand gallons. These are filled from permanent streams by cement troughs. These leads are economically provided by forming cement grooves on the tops of the stone fences, which separate all the farms and are often used in dividing hillside farms into terraces.

A fanegada may produce 300 bunches of bananas a year. Six hundred kilos (1,300 pounds) of seed potatoes are required to plant the same area, the yield being 5 to 20 times the amount planted. One and a half to two pounds of tomato seed will plant a fanegada and yield two hundred to six hundred 60-pound cases.

ROUMANIAN OIL IN GREECE.

[From American Minister John B. Jackson, Bucharest.]

It is announced that the renewal of relations between Roumania and Greece, which took place about a year ago, has led to an order for Roumanian petroleum for the Greek Government's monopoly. Previous attempts were made (in 1903-1905) to find a substitute for the American article, while the experiment made with petroleum from Russia was unsatisfactory. The present order is experimental and further orders are conditional.

ORANGE CULTURE IN PALESTINE.

[From Consul James Oliver Laing, Valetta, Malta.]

The following translation has been made of an article in the *Deutsche Levante-Zeitung*, and will supplement the articles which have already appeared in *Daily Consular and Trade Reports* on the citrus-fruit exports of Palestine (issue for Feb. 10, 1912) and packing oranges in Palestine (issue for Nov. 23, 1911):

About 40 years ago the orange growers at Jaffa began to cultivate the fruit on a large scale. The production increases from year to year, so that the outlay of capital can be regularly enlarged. Where single gardens of 2,000 to 3,000 trees existed there are now cultivated orchards of 15,000 to 20,000 trees. Such large undertakings had naturally a prejudicial effect on the smaller plantations; while a box of oranges formerly brought \$1.16 to \$1.54 on the spot, the return is now only 58 to 77 cents. The owner of an orchard which yields 2,000 boxes of oranges, at 77 cents a box, must, with the income of \$1,540, reckon costs of \$772. On the other hand, large orchards which produce 20,000 boxes show expenses of only \$2,895 to be paid from \$15,400 income. The future belongs here, as well as elsewhere, to the large producer.

Cultural and Packing Methods.

The orange tree likes a warm sea climate, and so the Arabs have for ages raised it when possible in the loamy soil of the coast. At the beginning of summer the soil is turned over with a plow, drawn by 18 to 20 horses, to a depth of about 31 inches and then left to the rays of the sun. At the beginning of winter the surface is leveled and irrigating ditches made.

In planting an orange grove holes for the plants are dug 1 yard deep and about 1½ yards in diameter. The trees are planted in squares, with one in the center. In each hole a lemon tree, a bitter-orange tree, or a sprout of an orange tree is planted. In two years the trees are budded with the variety of citrus fruit which it is desired to grow. In four years the tree bears its first fruit. Every three years the soil is manured with a mixture of horse, cow, and goat dung. Recently artificial fertilizer has been introduced with very good results. At the end of November the tree is cleaned and in March the soil is worked over.

The cost for fertilizer, water, and labor averages \$1,737 annually for an orchard of 15,000 trees. At the beginning of July, when the harvest is in sight, middlemen from Jaffa visit the plantations and estimate the crop prospects. The average price paid for fruit per box this season was 67 cents.

The picking of the fruit begins two hours after sunrise and continues four days. The fruit is stored in sheds up to about 12 inches in height, in order to let it dry and to avoid mold. Then the fruit is sorted, wrapped in silk tissue paper, and packed in boxes, the different sizes containing 86, 88, 96, 128, 136, 144, 152, 160, 250, or 300. Variation from this system is not permitted. The wood for the boxes comes from Roumania and costs \$12.50 to \$15.80 per cubic meter (35.314 cubic feet). The paper comes principally from Austria and Italy.

The Export Trade.

The principal market for Jaffa oranges is Great Britain. Liverpool, Manchester, London, and Hull take about three-fourths of the harvest. About 200,000 boxes go to Egypt yearly, while Hamburg and Trieste receive only 50,000 boxes. The output in 1910 was about 900,000 boxes, worth about \$1,158,000. For the 1911 season the output is estimated at 1,100,000 boxes. At the end of September the first shipments of unripe fruit go in small quantities to Trieste and Hamburg.

In order to develop the trade in Jaffa oranges new markets must be found. Russia would afford an opening if the tariff were not too high. The fruit endures long shipments at the beginning of the season; that is, from September to December; this means that it keeps in the boxes up to two months, so that shipment to India and China presents no difficulties. Oranges have been shipped to great advantage to Port Sudan, Khartum, Medina, and Mecca, and along caravan routes.

German importers have not yet found enough interest in Jaffa fruit in the inland-German market to undertake its importation extensively.

Tea.—Ceylon shipped 1,190,625 pounds of black and 201,529 pounds of green tea to the United States in the first two months of 1912, compared with 663,974 pounds and 107,124 pounds in the same months of 1911.

WRAPPERS FOR ORANGES.

[From Consul Robert Fraser, jr., Valencia, Spain.]

American firms seek information regarding the light semitransparent silk paper used in this district for wrapping export oranges. This paper, formerly imported from France, is now manufactured in this district and is put up in bales of 30 reams, which supply wrappers for about 140,000 oranges. Each sheet is printed with 6, 8, or 10 stamps, according as it is destined to wrap large, medium, or small fruit, and the cost of stamping ranges from \$6 to \$19 per bale. The lowest of these prices is for plain gold stamps with the name and devices of individual shippers and the highest for elaborate fancy branding in gold and two colors combined. The cost of the paper itself varies from \$13 per bale for the light-drab or cream-colored sample, and \$14 for the pale pink, up to \$16 for first quality white.

Owing to the desire of packers to excel one another in the artistic presentation of their brands on foreign markets, the cost of packing oranges has almost doubled during the last 12 years. A reaction is setting in this season against the use of expensive paper and still more expensive stamping and fancy ornamentation in packing citrus fruit, the advocates of simplicity favoring a return to plain paper and the elimination of every expense which does not enhance the intrinsic value of the fruit or improve its keeping qualities. The crusade against expensive packing, however, so far is not successful, as the leading packers who have attained a world-wide reputation as much by their fancy packing as by the superior quality of their fruit are not disposed to return to uniformity and simplicity.

The light pink-colored paper is mostly employed in wrapping fruit at the opening of the season, when it imparts the appearance of warmth of color to oranges still immature and pale, but a general preference is given latterly to white paper, as it throws into strong relief the fancy stamping in gold and colors now in vogue.

The paper industry of this country is well protected by a tariff amounting to \$3.47 on wrapping paper for fruit per 100 kilos (220 pounds), or equal to about 30 per cent ad valorem. The duty on wrapping paper is assessed under the schedule applicable to paper not exceeding in weight two-thirds of an ounce per square meter (10.76 square feet).

[From the Handels Museum, Vienna, Austria.]

Demand for Packing Material in Palestine.

There is at Jaffa, Asiatic Turkey, a considerable demand for packing paper, which is used in the shipment of oranges. In 1910 the value of the importation reached \$32,000. The article was to a great extent supplied by Sweden and shipped through the intermediary of Hamburg agents. The packing is usually made up in bales and supplied at about \$10 to \$10.40 f. o. b. Jaffa. Owing to the steady growth in the export of oranges from Palestine, requisitions for this material are likely to increase.

Asphalt Production in Switzerland.

Consul Francis B. Keene, of Geneva, learns that the only exploitation of asphalt in Switzerland is at Travers, Canton of Neuchatel, by the Neuchatel Asphalt Co., of London, England. It would appear from statistics that the annual extraction amounts to about 25,000 metric tons and that there is enough asphalt to keep the company running for a hundred years.

PRODUCTION OF STRYCHNINE AND NUX VOMICA.**INDIA.**

[From Consul José de Olivares, Madras.]

Nux vomica is abundantly produced in the following centers of the Madras consular district: In the Deccan, in Bellary, Cuddapah, Anantapur, and Karnul, in Nellore, and in the northern Circars—Ganjam and Berhampur. Seed to the amount of about 3,568 hundredweight (hundredweight=112 pounds) from the upper taluks, or districts, of the Godavari River are annually marketed. The native States of Cochin and Travancore in southwestern India produce considerable quantities of nux vomica, and the Trichonopoly district on the southeast coast also produces the seed, but to a lesser extent.

The nux vomica, strychnine, or snakewood is a slow-growing deciduous tree attaining a height of 30 to 40 feet and a circumference of 3 to 4 feet, its growth and development depending largely on the extent of the rainfall in the district to which it is indigenous. Generally the trees grow in a wild state and it is rarely that they are cultivated for commercial purposes. The young trees, however, in their wild state are in some cases attended and manured by the natives, and in such cases they come into bearing in 10 to 12 years. When it is desired to cultivate the nux vomica it is customary to plant the young seedlings in large tubs or pots of rich, loose soil, which must be kept well watered. It is reported, however, that poor results have thus far been obtained when raised or cultivated as garden or plantation trees.

Characteristics of Seeds—Handling the Output—Prices.

The tree bears a plum-like fruit that produces the seed—the strychnos nux vomica of commerce. This seed is round and flat, much resembling a satin-covered dress button, silvery and light bronze in color and varying in size from one-third to an inch in diameter. The seeds are harvested from March to July. In the case of the better qualities native gatherers collect the plums, from which the seeds are husked or washed out and dried in the sun. In other cases the seeds are merely gathered up from the ground beneath the trees, but the product thus obtained is of comparatively little market value.

Nux vomica gatherers are not employed on a wage plan, but sell the seeds they collect to village bazaar men, from whom the product is bought by merchants and sent to the markets at Madras. Exporters as a rule purchase the seeds from the markets, and at times they are obliged to advance funds for their supply.

Prices vary according to the quality of the seeds. If they are silvery in color, well dried, and of large size the price is \$5.84 per 500 pounds. For second-quality seeds, which are light bronze in color, of smaller size, and not perfectly dry, the prices range from \$4.87 to \$5.19 per 500 pounds. The poorest quality, which is generally inferior in appearance, of a creamy color, and very small sells for \$3.25 to \$4.22 per 500 pounds.

[From Consul Edwin S. Cunningham, Bombay.]

Exportation through Bombay.

The snakewood, or nux vomica, tree is not found in great numbers in the Bombay consular district, although Bombay is the port

through which a large part of the *strychnos nux vomica* is exported. Exports statistics for the last two years are given in the following table (hundredweight = 112 pounds).

Exports to—	1909-10		1910-11	
	Hundred-weight.	Value.	Hundred-weight.	Value.
United Kingdom.....	1,121	\$2,609	762	\$1,770
Italy.....	40	90		
Egypt.....	8	12		
United States.....			406	770
Total.....	1,169	2,711	1,168	2,540

The seed is bought as openly and freely on the market in Bombay as any other crude drug. The tree is not cultivated nor are the seeds harvested regularly by commercial interests. There are a few exporting firms in this part of India who, when they require seeds for any purpose, instruct their representatives in the various districts where *strychnos nux vomica* may be collected, and these representatives send out natives to gather the material. The natives collect it by hand and are paid about 65 cents per hundredweight.

COCHIN CHINA.

[From Consul Hubert G. Baugh, Saigon.]

Although found in four of the divisions of Cochin China the *strychnos nux vomica* tree has not been cultivated nor has the collection of seeds been made a regular business. The trees fructify in May, but most of the seeds fall to the ground and are left untouched. When the demand is strong enough the natives gather the seeds and sell them to the Chinese traders, who in turn sell them to the exporters. The work of gathering the seeds is entirely voluntary on the part of the natives, who are paid for the amount gathered and not for their time. The seeds exported from Saigon come mainly from Cambodia.

The bulk of the medicinal seeds exported go to Hongkong and to England, as shown in the following figures for the three years ended with 1911. To England, 387,828 pounds in 1909, 399,572 pounds in 1910, and 638,505 pounds in 1911; to Singapore, 724,686 pounds in 1909, 461,027 pounds in 1910, and 814,046 pounds in 1911. *Nux vomica* seeds comprise about 90 per cent of the foregoing exports. The market price of the seeds is usually about 1 cent per pound. There is no export duty, but a statistical charge of about 2 cents per package is made. Local exporters say that the business is not large enough to interest them.

[A previous series of reports on strychnine and *nux vomica* appeared in Daily Consular and Trade Reports for Oct. 20, 1911.]

"Celluloid, mica, and other similar ware" was imported into the United Kingdom to the value of \$2,183,885 in 1910, reexports being \$756,488. Consul General John L. Griffiths adds that four German firms producing celluloid articles are directly represented in London.

THE DIVISION OF EASTERN BENGAL AND ASSAM.

[From Consul General William H. Michael, Calcutta, India.]

The Province of Eastern Bengal had a population of 34,500,000, according to the census of 1911. This was made up by combining 27,500,000 people in Bengal and 7,000,000 in Assam.

This Province was created by Lord Curzon; and, under the administration of a lieutenant governor, during its brief existence the Province prospered in every way. A new capital was built near Dacca at a cost of about \$2,000,000. By the recent reorganization Assam becomes a district under the administration of a chief commissioner who is directly under the governor general in council.

The Trade of the Divided Province.

Looking through the report on the trade carried by rail and river in the Province of Eastern Bengal and Assam during the fiscal year 1910-11, one finds that the total quantity decreased by 4.5 per cent, but the total value increased by 6.8 per cent. Jute is stated to be mainly responsible for both the rise in value and the fall in quantity; and jute is grown chiefly in the districts that are to be severed.

Almost every item of import increased in value compared with the preceding year's figures, cotton manufactures, grains, provisions, and coal and coke being the exceptions. Owing, probably, to contraction of local dealers' stocks, the imports of all cotton goods decreased in quantity by 7 per cent and in value by 3 per cent. This is the most important trade and, when the added districts are taken away, may be expected to fall to a very low figure. Metals and metal manufactures increased in value appreciably. A distinct sign of prosperity is the steady increase in importations of kerosene, which exceeded in value the preceding year's figures by \$183,000.

Of the exports, according to the report, by far the most valuable is jute, but it is curious to note that while the quantity of exports decreased by 237,800,000 pounds, the value increased by 13 per cent over the 1909-10 shipments. This is ascribed to the rise in price of the raw material. The next most important article of export, tea, increased in quantity by 82,000,000 pounds, the increase in value, owing to the rise in prices, being 13 per cent.

Effects of the Change.

Looking to the trade of the blocks which will be severed, it is found that they are responsible for the principal increases. The three Assam blocks imported rice, coal, salt, kerosene, and sugar, while the principal articles of export were tea, timber, coal, and paddy. A curious point is that Assam exports paddy and imports husked rice from Eastern Bengal.

It is contended that there will be an enormous difference in the next trade returns from Assam, after the districts of Eastern Bengal are taken away. These districts will also lose a considerable proportion of their trade, which will probably not flow in the same proportion Assam-wards. Indeed, it is difficult to forecast the effects of the changes.

"Concrete Construction on the Live-Stock Farm" is the title of a new bulletin for sale at 5 cents by the Superintendent of Documents, Government Printing Office, Washington, D. C.

SEA-BORNE TRADE OF MADRAS PRESIDENCY.

[From Consul José de Olivarez, Madras, India.]

In October, 1911, the sea-borne trade of the Madras Presidency aggregated \$7,781,655. It is encouraging to note that the imports from the United States increased that month to \$175,859, the chief items coming direct being kerosene oil, \$153,990; metals (steel, iron, nails, etc.), \$5,780; hardware and cutlery, \$2,497; apparel and millinery, \$1,890; scientific instruments, \$1,604; lubricating oils, \$1,524; spirits, \$1,065; drugs and medicines, \$1,035; firearms, \$588; gum (rosin), \$538; paper, for printing purposes, \$504; clocks and watches, \$463, and provisions (canned goods and cereals), \$416.

It is desired to emphasize the fact that in addition to this direct import trade from the United States, consignments of American-made goods of various descriptions are frequently received from the agencies or depositories of American manufacturers and exporters in Europe and elsewhere abroad, the result being that such goods are accredited to the imports from other countries than the United States. Among the articles of American manufacture which figure to a considerable extent among the reshipments referred to are sewing machines, talking machines, drugs and medicines, provisions, hardware, machinery, and motor vehicles.

The principal exports to the United States in October were: Hides and skins, \$152,697; tea, \$9,956; pepper, \$5,675; coconut oil, \$4,147; cotton piece goods (to Philippines), \$3,001; and coir manufactures, \$1,751.

FAR EASTERN NEWS.

[From London and China Telegraph.]

New Bank for China.

A new native bank, capital \$1,000,000, is being started by the local merchants of Shanghai, and if the flotation succeeds it will be the first time that a bank in the real sense of the word, the capital of which was subscribed by the public, will have been established in Shanghai. Hitherto the banks have been one-man or two-men concerns, and their accounts were sealed books to the public that invested in them.

Railway Building in Chosen (Korea).

A telegram to St. Petersburg says the Japanese Government has postponed indefinitely the construction of the projected railway between Phyoenyang and the port of Gensan, on the east coast of Chosen (Korea). A road 125 miles long will be begun in April instead, and, owing to its importance for trade between the two places, it is hoped that it will be finished as early as October.

Higher Rates from Japan.

The steamship companies which form the New York-Suez Conference (the American Asiatic Steamship Co., the Indra Line, the Hamburg-American Steamship Co., the Anglo-American Oil Co., the American and Oriental Line, the American and Manchuria Line, and the Dodwell Line) notified shippers from Japan that from April 1 rates on all cargo to New York are advanced by approximately 10 per cent, with the exception of cargo not otherwise specified, on which the rate will be 35s. (\$8.50) per ton weight or measurement, instead of 30s. (\$7.30) as hitherto. Cargo shipped at Yokkaichi will be subject to an additional 2s. 6d. (61 cents) per ton. The steamship companies which form the Japan Homeward Freight Conference have issued a circular to shippers stating that after May 15 an increase of 10 per cent will be made on all rates of freight (with a few exceptions), and that in addition an extra shilling per ton will be charged on all shipments to London. They state that this increase has been considered necessary owing to the general rise in labor and other charges, and to the fact that in London charges in connection with the landing and delivery of cargo are borne by shipowners, from which they are exempt at all other ports.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8630. Fiber for making paper.**—An American consul reports that a business man from the United States who recently visited his district investigated the making of paper from certain fibers abounding in the region in question. This merchant is also familiar with certain canes that grow abundantly in various sections of the United States and is of the opinion that they could be utilized in the manufacture of pulp for paper making. Copy of the report, containing further details, will be sent to interested firms by the Bureau of Manufactures.
- No. 8631. Establishment of wireless-telegraph stations.**—An American consul has forwarded a copy of a decree, with a translation, in regard to the proposed establishment of four wireless-telegraph stations in the country in which he is located. He adds that a further description of the class of station to be installed will be forwarded when the information becomes available. Copies of the decree and translation referred to will be loaned to interested persons by the Bureau of Manufactures.
- No. 8632. Contracts for projectiles.**—A special report relative to contracts for projectiles in a foreign country has been submitted by an American minister located in the country in question. This report deals with the specifications, method of inviting proposals, awarding of contracts, etc., and will be loaned to manufacturers of these articles upon request to the Bureau of Manufactures.
- No. 8633. Railway supplies of various kinds.**—A foreign Government has decided on the construction of a railway and has issued a call for tenders to supply rails, sleepers, fishbolts, etc., for which forms and specifications can be obtained from the Bureau of Manufactures. Copy of a letter from the official in charge of this matter was also forwarded by the consul submitting the report. This official believes that much of the required equipment can best be supplied by manufacturers in the United States, and he expresses a hope that in addition to the supplies mentioned American firms will tender for excavating machines suitable for cuttings, side cuttings and ballasting work, concrete mixers, stone breakers, and other apparatus used in railway construction.
- No. 8634. Railroad supplies and other Australian Government stores.**—The American consul at Newcastle, New South Wales, Australia, has forwarded a book of contract prices for Queensland Government stores for 1912-13, also Queensland Government railway contract schedules and store contracts. American firms can glean from these the nature and quantities of supplies needed, prices at which they are delivered, etc., which may enable them to compete for future orders.
- No. 8635. Automatic steam-towing equipment.**—A cablegram has been received from an American consular officer requesting catalogues of automatic steam-towing equipment from American manufacturers. These are desired at the earliest possible moment.
- No. 8636. Shoe polish.**—In response to inquiries from the United States as to the possibility of a market for shoe polish in his district, an American consul in a European country reports that the general public will not spend over 6 cents for a box of polish. If an American polish can be retailed there at that price a good market can be worked up, but it will be difficult to sell any quantity at a higher price. Recently some inquiries have been received at the consulate as to the prices of equipment for public stands where shoes may be polished; there are no public stands at present.
- No. 8637. Jute bags.**—It has been brought to the attention of a German agent for textile goods that a jute bag of excellent quality is manufactured by an American firm, the name of which he does not know. The bag is seamless and woven by a special process. The inquirer says there is a good market for such an article and that he would be in a position to accept an agency for a large district if the bag on examination appears to have a decided advantage over the domestic product. He would also consider the agency for jute cloth. Manufacturers would do well to send samples of both, writes an American consul, together with quotations. Prices should be quoted for delivery in the city in which he is located, or at least for delivery at Hamburg. Correspondence should be in German.

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FOREIGN TARIFFS.

BELGIAN KONGO.

[From *Moniteur Officiel du Commerce*, France, Jan. 25, 1912.]

Prohibition on Saccharine.

By an order which went into effect in Belgian Kongo in the fall of 1911 the importation, manufacture, transportation, and sale of saccharine and similar materials are forbidden. Saccharine products and products sweetened with substances other than cane sugar, beet sugar, milk sugar, and glucose sugar—particularly those sweetened with glycerin—shall not be imported. It is specified in the order that it is meant to include in general all synthetic chemical sweetening which does not possess food value.

CHILE.

[From report by Consul Charles L. Latham, Punta Arenas.]

New Tariff in Magallanes Territory.

In connection with the new Chilean duties (as announced in Daily Consular and Trade Reports for April 4, 1912), in effect April 13, 1912, the provision that certain rates of the Chilean tariff shall be in force in the Magallanes Territory is of particular interest. Up to this time Punta Arenas has been a free port and importations into the Magallanes Territory have been free from customs duty. Punta Arenas is the chief commercial city and the capital of the Territory.

The law of February 12, 1912 (Daily Consular and Trade Reports for April 4, 1912), imposes permanently the rates of the Chilean tariff on the following products imported into the Magallanes Territory: Bran, mineral waters, pepper, alcohol, wine spirit, liqueurs, brandy (with or without sweetening), starch, vetches, playing cards, barley, beer, cigars and cigarettes, pickles, brooms, brushes (except toothbrushes and nailbrushes), vermicelli, beans, fruits (dried, preserved, in the juice or in alcohol), biscuits and crackers, flour, con-

densed milk (sweetened or unsweetened), vegetables (fresh, preserved, or dried), wood, corn, butter, potatoes, fodder, cheese, common salt, sole leather, tanned hides, manufactures of leather (except belting for machines), vinegar, and wines.

The principal imports from the United States into the territory which will be affected by the imposition of the duty are alcohol and alcoholic beverages, cigars and tobacco, condensed and evaporated milk, dried and preserved fruits and vegetables, lumber, shoes, and corn.

CHOSEN (KOREA).

[From a published Reuter dispatch.]

Proposed Abolition of Export Duty on Rice.

The Governments of Great Britain and France have protested against the proposed abolition of the export duty on rice shipped from Chosen (Korea). It is held that if this export duty were abolished it would be contrary to the provisions of the rescript to the agreement by which Chosen was annexed to Japan, published August 29, 1910. It is provided in the decree of the Governor General of Chosen, published on the date above mentioned, that articles exported from Chosen to Japan should be subject to the same export duties as had hitherto been in force. The abolition of the duty would seriously interfere with the exportation of rice from Saigon and Rangoon to Japan.

FRANCE.

Further Postponement of New Tare Regulations.

The American ambassador to France has reported a further postponement of the application of the new tare regulations which were decreed August 27, 1911. According to this report the date of August 1, 1912, has been set as the time when the new regulations will take effect. As recorded in Foreign Tariff Notes No. 5, page 139, the application of these regulations was postponed first until January 1, 1912, then later until April 1, 1912.

The ambassador states that in the modification of the tare regulations, which is taking place in the meantime, certain recommendations made by the British Chamber of Commerce, and approved by the American Chamber of Commerce in Paris as meeting the objections raised by American exporters to the terms of the regulations as first decreed, are being given consideration by the French Government. These recommendations are said also to meet with the approbation of representatives of German exporters who were also dissatisfied with the regulations as originally decreed.

[From Annales des Douanes, Jan. 15, 1912.]

Goods Imported from Canada via United States.

Under the Franco-Canadian commercial convention of 1907 (Tariff Series No. 6 C) it was provided that certain articles imported from Canada into France (schedule A) should be entitled to the rates of the minimum tariff of France, if imported direct from a Canadian port to a French port. Owing to the absence of direct connections between Canada and the port of Marseille it has been necessary to ship Canadian goods intended for that port by way of New York, and by reason of such shipment through a third country, the goods were

dutiable at the rates of the general tariff of France unless they happened to be goods on which the rates of the minimum tariff were applicable when imported from the United States; thus the reduced rates of duty stipulated in the convention could not be claimed on Canadian goods shipped to Marseille.

The French Government has changed its requirements in this regard (decision of Jan. 5, 1912), and now the customs officials have been authorized to collect the rates of the minimum tariff on all goods of Canadian origin included in schedule A of the Franco-Canadian convention when imported into Marseille by way of New York. Such admission of goods is contingent upon the production of a special certificate signed by the French consul in New York to the effect that the goods have undergone no alterations, and that the packing and markings have not been changed in the United States—this certificate to be required in addition to the regular documents proving the origin of the goods.

The Government in making this concession lays emphasis on the fact that the relaxation of the requirements for goods shipped to Marseille via New York is only temporary, and that immediately upon the establishment of a direct line of transportation between Canada and Marseille, direct importation, as provided for in the convention, will again be required.

[From Journal Officiel, France, Feb. 13, 1912.]

Proposed Duty on Crude Rubber.

A bill has been introduced in the French Parliament providing for the imposition of an import duty on crude rubber imported from foreign countries. Under the tariff crude rubber is free of duty.

GUADELOUPE.

[From Journal Officiel, France, Feb. 28, 1912.]

Octroi Duty on Machinery, Fats, Bags, etc.

By a decree of the President of France of February 13, 1912, the tariff of octroi duties in force in Guadeloupe was changed by the following amendments and additions:

The octroi duties on machinery and material for use in agriculture and manufacturing are made noneffective for a further period of four years, as provided for in the decree of May 9, 1907; the rate of the octroi on margarine, oleomargarine, and similar food fats, and also on vegetable food fats, is reduced from 20 francs to 15 francs per 100 kilos; an octroi rate of 0.04 franc each is imposed on empty jute bags, and a rate of 0.05 franc each is imposed on empty bags of hemp, linen, cotton, or other material; when such bags are imported filled with merchandise, half the rates specified for the empty bags is to be collected. (Kilo = 2.2046 pounds; franc = \$0.193.)

MEXICO.

[From Diario Oficial, Mexico, Mar. 8, 1912.]

Free Admission of Corn into Yucatan.

Owing to the scarcity of corn in the Yucatan Peninsula, the President of Mexico decreed on March 8, 1912, that the free importation of corn should be allowed through the customhouses of Campeche, Isla del Carmen, and Progreso, from the date of the decree until June 30, 1912.

PARAGUAY.

[From *Moniteur Officiel du Commerce, France*, Mar. 14, 1912.]

Opening of Customhouse of Humaita.

The customhouse of Humaita, Paraguay, has been reopened to foreign commerce and the customhouses of Villa Franca Vieja and Concepcion have been provisionally closed to commerce.

ROUMANIA.**Changes in Customs Tariff.**

American Minister John B. Jackson, Bucharest, has transmitted a copy of a law promulgated March 14, 1912, providing for many changes in the customs tariff of Roumania, most of them reductions in the rates of duty, and some of them simply changes in the classifications to include articles formerly not specially mentioned in the tariff. The law went into effect on the date of promulgation. Announcement of the proposed modification of the tariff was made in *Daily Consular and Trade Reports* for Mar. 26, 1912.

It is important to bear in mind that the present changes affect the general tariff, which applies to imports from the United States. In many instances the general rates of duty have been reduced below the conventional rates in effect previous to the present law. Thus, as a result, the rates now applicable to imports from the United States are lower than the rates formerly applicable to similar imports from countries entitled to the conventional rates by treaty with Roumania. By the law of March 14, 1912, export duties of 2 lei (\$0.386) per 100 kilos (220.46 pounds) are imposed on scrap iron, old copper, and on bran of any cereals, formerly free.

The complete text of the changes in the Roumanian tariff, in Roumanian, is on file in the Bureau of Manufactures.

RUSSIA.**Government Assistance for the Agricultural-Machinery Industry.**

The following translation of an article from the *Trade and Industry Gazette* of February 28 has been transmitted by Consul General Snodgrass, of Moscow:

The Ministry of Commerce and Industry introduced in the Government Duma on September 24 (11), 1911, a bill the object of which is to decide what steps were necessary for the encouragement of the construction of agricultural machines in Russia. The finance committee of the Duma, after going over this bill, reported favorably and urged active measures for the development of the agricultural-machinery industry in Russia. The committee recommended the following changes in the bill:

(1) In regard to the free importation of frames, machinery, etc., instead of authorizing the Minister of Commerce and Industry, with the consent of the Minister of Finance, to allow the free importation of such machinery at the special request of the importers, the committee considers it best to have such machinery come in free of duty according to rules fixed by those ministers. The Minister of Commerce and Industry, with the consent of the Minister of Finance and the Minister of Agriculture, should be authorized, in case of need, to add to the list of machinery to be admitted free any other implements or machinery relating to agriculture.

(2) In regard to the reduction of stamp duty, the finance committee reports that the proposed reductions are insufficient to influence the sale of agricultural machines made in the country, and in view of the difficulties attached to the administration of the provisions relating to such reductions, the committee has decided to strike out this clause from the bill.

(3) In regard to reductions of the trade tax, the finance committee is of the opinion that such reductions will tend to bring more capital into the agricultural-machine business, and therefore the proposal of the ministry remains unchanged.

(4) In regard to the question of permitting parts of agricultural machines to come in free of duty, the finance committee finds it indispensable to prolong the law of May 24, 1909,¹ providing for the admission of such parts of machines and binder twine free of duty, authorizing the Ministry of Commerce and Industry to add to the list of parts of machines admitted free of duty all other parts of thrashing machines, of reaper-binders, and of reapers with automatic ejectors.

(5) In regard to the question of prolonging the duration of the temporary regulations of the general customs tariff, relating to the admission of agricultural implements and machinery at reduced rates, the finance committee finds it inexpedient to permit such temporary regulations to become fixed without limitation of time, thus taking the opposite stand from that of the Minister of Commerce and Industry. The committee is of the opinion that such regulations should be limited in point of time, so as to go out of effect upon the expiration of the Russo-German treaty, viz, December 31, 1917. In that event the Government in negotiating with Germany will have her hands free in the matter of the duty on agricultural machinery and implements.

(6) As to the question of awarding premiums for the construction of agricultural engines and complicated agricultural machinery, the finance committee agrees with the suggestion of the Ministry of Commerce and Industry, but considers it necessary to award premiums not only for agricultural engines but also for steam thrashers and steam reapers and mowers.

Furthermore, the finance committee has considered the proposed Government credit measures for the encouragement of agricultural machine and implement construction, and acknowledged that it is necessary to take steps for the purpose of supplying the agricultural-machinery industry with capital on easy terms, and giving the purchasers of home-made machines the most favorable credit terms possible. The committee also deems it necessary that the Government Bank should fix for transactions dealing with the home production of such machines a reduced rate of interest, and should extend to six months the discount term for certificates issued by the boards of zemstvos for the purchase of home-made agricultural machinery.

[From *Moniteur Officiel du Commerce*, France, Jan. 25, 1912.]

Machines and Apparatus of Which the Use is Not Known.

The customs officials of Russia have given notice in a customs circular that special procedure is advisable in the introduction into the country of machines and apparatus the use of which is unknown to the customs officials. In order to avoid delay and the inconvenience of expert inspection it is suggested that those interested in the importation of such machines would better submit to the customs officials not only drawings and explanatory diagrams, but also brief indications of the purpose of the machinery and a description of the method of operation and the nature of the work accomplished.

TURKEY.

[From American Ambassador W. W. Rockhill, Constantinople.]

Extension of German Treaty.

In the Turkish official gazette for February 25, 1912, there appeared an announcement of the extension of the German treaty of commerce with Turkey, 1890, and of the annexed supplementary convention of 1907, for a period of two years. This assures the continuance of the customs duty of Turkey at the present rate until June 25, 1914, as provided for in the 1907 convention of the capitulatory Powers. By that convention the rate of the customs duty in Turkey was raised from 8 per cent *ad valorem* to 11 per cent *ad valorem*, and the 3 per cent increase was to remain in force until 1914. Ger-

¹ See Tariff Series No. 3A, p. 14.

many, however, had a treaty of commerce with Turkey which was due to expire in 1912, and in accordance with certain provisions of that treaty, Germany did not sign the general convention of the Powers, but made a special convention with Turkey consenting to the increase of 3 per cent in the customs duties until March 13, 1912. By the present extension Germany agrees to the continuance of the 3 per cent increase until 1914.

Unless Germany had made the present extension of her treaty with Turkey, which expired in 1912, the 3 per cent increase in duties would no longer have been applicable to imports from Germany, which would have been subject to the old rate of 8 per cent ad valorem, formerly fixed as the rate of import duty in Turkey by agreement with the capitulatory Powers. And by virtue of the most-favored-nation clauses this rate of 8 per cent ad valorem would also have become applicable automatically to imports from the other principal Powers, thus effecting a general reduction of 3 per cent ad valorem in the rates of duty.

FORMOSAN BUSINESS NOTES.

[From Consul Samuel C. Reat, Tamsui.]

First Automobile in Formosa.

Count S. Sakuma, Governor General of Formosa, has imported the first automobile into this island. It is a four-cylinder car and was constructed in Tokyo. Another car is to be ordered soon by the Taiwan Railway Hotel for the use of its guests.

Fiber Hats and Yellow Rattan.

The export of Formosan fiber hats in February reached 111,537, valued at \$85,116.

The Productive Industry Bureau says that yellow rattan is becoming an important article of commerce, the requirements for sugar packing increasing the demand. It is also used extensively for furniture making. The Formosan production for 1911 was 1,122,765 pounds, valued at \$2,500. The rattan supply is limited, its gathering in the savage districts being rather hazardous. With the extension of frontier lines the work is carried on with less personal danger.

Sugar Output, Oil, and Camphor.

From the January and February operations of the sugar mills the following fairly correct estimate is now made for the 1911-12 crop: Centrifugal sugar, 220,000 tons; brown sugar (native mills), 30,000 tons. The production would have been 25 per cent larger had it not been for the typhoon damage to cane last September.

The oil fields of Formosa are limited to Byoritsu, Shinchiku, but the industry is hardly promising. The output in 1910 was 12,827 gallons. The production is consumed locally.

Camphor production from the leaves has passed the experimental stage and the Monopoly Bureau will plant large areas in camphor trees during the next few years. It is claimed that after 15 or 20 years' growth the leaves are available for camphor extraction. The trees now utilized are 500 to 1,000 years old. The area of leaf-camphor afforestation is at present 10,650 acres. The Japanese wisely intend to conserve the source of supply of one of their important monopolies.

MANCHURIAN BUSINESS NOTES.

[From Consul Albert W. Pontius, Dalny.]

New Substitute Timber for Railway Sleepers.

American timbermen seem to be watching closely the progress of the great reconstruction of China as a republic. They will be interested in the newly developing use of "nara" (*Quercus glandulifera*, glandule-bearing oak), said to be an excellent and much cheaper substitute for chestnut and "keyaki" (*Zelkova acuminata*), which make the best railway sleepers in these parts. The "nara" has great durability and, although obtainable on much easier terms than either of the other two, lasts almost as long as either. There is thought to be unlimited field in China for this timber, once order is restored.

Asbestos Mine.

An asbestos mine was discovered last September on the hillside of Daiohshozan (Mount High Priest), to the east of Chinchou and seen to the northeast of Dairen (Dalny) across the bay. The lucky Japanese discoverer secured permission last January to work it, backed by a company called Washin Yoko. This mining field comprises over 400,000 tsubo (1 tsubo equals about 36 square feet), lying below the Buddhist temple, about halfway on the hillside. The filaments are snow white in some cases and pass to brown in others. Those first found were barely over $\frac{1}{4}$ inch long, but now filaments 3 inches and longer are obtainable, with still longer ones in prospect. On February 17 the first sale of 30,000 pounds was made. There is thought to be a fine market abroad for the output.

Through Bills of Lading in Manchuria.

Since April 1 through bills of lading are issued from Shanghai over the South Manchuria Railway to points on the Chinese Eastern Railway, in accordance with an arrangement effected by A. H. Gintz, chief of exploitation of the Chinese Eastern Railway. The South Manchuria Railway will receive goods, pass same through the Dairen (Dalny) customs, handle and ship them to the end of their line, there to be handed over to the Chinese Eastern Railway. The Chinese Eastern Railway will receive the goods, transact the necessary customs work, and carry the goods on to destination, completing the obligation. The through freights, in principle, will be the respective tariffs, but special freight rates will be allowed by arrangement with the carriers.

This arrangement should be an impetus to trade in northern Manchuria, as the heavy expense attached to shipments into this territory have made many articles of commerce unpurchasable. Handling commissions at points of transshipment have been prohibitive, but these are now absorbed in the tariff rates.

Bone-marrow Oil Used in Bohemia.

Consul J. I. Brittain, of Prague, states that bone-marrow oil is used in Bohemia for oiling sewing machines. This oil is put up in small bottles containing 50 grams; it retails for 6 cents and wholesale at 3.6 cents a bottle. The wholesale price of vaseline oil is 32 cents, cottonseed oil 20.3 cents, and mineral oil 9.7 cents for 2.5 pounds.

THE BRITISH METROPOLIS AND ITS EMPLOYEES.

[From Consul General John L. Griffiths, London, England.]

From a governmental point of view London is a complex organization, there being no less than 29 cities and boroughs with separate administrations within what is known as metropolitan London. Each has its own mayor and council. There is, however, an authority whose jurisdiction is coextensive with what is known as the administrative County of London, called the London County Council, whose secretary has furnished information concerning the attitude of employees toward the council and of the council toward its employees.

It may assist to a better conception of the work of the London County Council to point out that it has jurisdiction over the public-school system of Greater London, the fire department, the street car system, asylums, bridges, highways, department of health, parks, building regulations, etc.

Tramways Department—Freedom to Organize.

Special conditions therefore prevail in the various branches of the council's work. For instance, in the street car department, where the conditions are naturally peculiar, there has been established a scheme of conciliation, the details of which are set forth in a circular entitled "Scheme for conciliation boards for tramway employees." [A copy of this pamphlet will be loaned by the Bureau of Manufactures.]

There are 10,800 employees in the tramways department, which has been under the jurisdiction of and operated by the council since January 1, 1899. During this period there has been no well-defined, organized strike to obtain certain changes in wages, hours of labor, etc., though there was, during 1911, a sympathetic strike of motormen and conductors, incited by the general strike among railway employees; this, however, was of but two or three days' duration. The chief officer of the tramways department has complete control of the staff, except certain officials appointed by the council.

There is no ordinance or law affecting the question of strikes, nor is there any legal restriction upon organization among employees, a large number of whom are conceded to be members of various trade-unions. On the contrary, freedom of membership is specifically granted under a rule of the council, which reads:

No man employed in the council's service shall be in any way prejudiced by reason of his belonging to any trade or other organization. No official or foreman shall make any inquiry directly or indirectly, under any pretense whatever, whether any workman belongs or does not belong to any trade organization, and should he incidentally become aware of the fact, he shall make no difference by reason thereof. Any interference, whether by officials, foremen, or others on the council's works, with the freedom of any of the workmen in this particular will involve instant dismissal.

No Board of Grievances.

The council does not maintain a board of grievances, but provision is made for a presentation of personal matters by employees through the following standing order:

An official desirous of bringing under the notice of the council, or of a committee of the council, a matter concerning himself or his position, shall do so through the head of his department. If the head of the department decline to take cognizance of the matter submitted to him, or if he deal with it in a manner of which the official may think he has reason to complain, the official shall be entitled to lay his complaint before the deputy chairman, who shall hear and determine the matter or bring the same before such committee of the council as he may think best. In view of the right

thus secured to them, officials are prohibited from making personal appeals, written or oral, direct or indirect, to individual members of the council, and any such personal appeal will be held to be a breach of discipline.

It is not the general practice to receive representations other than those made in the way prescribed in this standing order, but there have been occasions on which committees have received representations made on behalf of employees by outside bodies, such as trade-unions.

FRENCH MINERAL STATISTICS.

[From Consul William H. Hunt, St. Etienne, France.]

Statistics recently published by the French Ministry of Public Works show the total production of coal in France during 1911 to have reached 38,643,531 metric tons (metric ton = 2204.6 pounds) of hard and soft coal, compared with 37,634,893 metric tons in 1910, an increase of 1,000,000 tons.

The following table shows the production in the principal French coal-producing centers:

Districts.	Metric tons.	Districts.	Metric tons.
Nord and Pas de Calais.....	26,140,090	Bourbonnais.....	833,672
Loire.....	3,733,636	Alpes Occidentales.....	381,851
Bourgogne and Nivernais.....	2,246,573	Hierault.....	262,913
Gard.....	2,093,897	Vosges Meridionales.....	188,133
Tarn and Aveyron.....	1,801,474	Creuse and Correze.....	152,210
Auvergne.....	550,658	Ouest (West).....	100,314

The Ministry of Public Works also furnishes the following statistics of the world's production of the principal mineral substances in 1911:

Minerals.	Metric tons.	Minerals.	Metric tons.
Coal.....	1,113,308,400	Copper.....	892,700
Iron.....	54,408,900	Zinc.....	856,000
Petroleum.....	39,998,100	Tin.....	116,000
Salt.....	17,219,600	Gold (fine).....	1,086,000
Lead.....	1,063,000	Silver.....	16,343,000

¹ Kilo (kilo=2.2 pounds).

The report says that the production of copper increased from 486,000 metric tons in 1900 to 856,650 metric tons in 1910, of which the United States produced more than one half.

Consular Trade Conferences.

Consul General Maxwell Blake, of Tangier, Morocco, advises, under date of March 18, 1912, that he expects to arrive in the United States late in May on 60 days' leave of absence. Commercial organizations and business men desirous of discussing trade conditions in Morocco with Mr. Blake may communicate with him for appointments at the following addresses: New York, N. Y., Waldorf-Astoria Hotel, May 27 to 29; Washington, D. C., New Willard Hotel, June 1 to 7; Kansas City, Mo., 402 Keith & Perry Building, June 15 to 25; Portland, Ore., 721 King's Court, June 20 to July 1. Consul General Blake also expects to visit Chicago and St. Louis during his stay in the United States, and his address in those cities will be announced later in Daily Consular and Trade Reports.

NOTES FROM ARGENTINA.

[By Consul General R. M. Bartleman, Buenos Aires.]

Wool clip.—The indications are that the wool clip this year will surpass both in quantity and quality that of the previous year.

Skating-rink profits.—The report of the Palais de Glace for 1911 shows that the net profit for the year closed was \$49,940 (United States gold). This shows that skating is still popular in this locality.

American coal.—A British steamer has arrived at Puerto Militar with 5,269 tons of coal from Newport News, Va. This is said to be the first occasion on which coal from the United States has been received for the fleet.

Installation of washhouses.—The Minister of Public Works has accepted the \$46,155 tender of Heinlein & Co. for installing steam washhouses in the mixed regional asylum for the insane at Oliva, Cordoba, and for persons of weak intellect at Torres, Buenos Aires.

Stamp remittances abroad.—The postal authorities have decided to adopt the "reply-coupon" system for international correspondence, in accordance with the regulations of the convention of Rome; 100,000 coupons have been ordered from the international office at Berne.

Real estate sales.—According to the report of the registrar of property, during 1911 the following sales of real estate in the Federal capital took place: With buildings, 9,706 properties; without buildings, 21,056 properties; area, 19,102,671 square feet; value, \$210,316,732 (United States gold).

Artesian wells.—Successful results are being obtained in various parts of the Republic in connection with borings made in search of water. At one point at a depth of about 330 feet water was struck and a continuous supply of about 600 gallons an hour was obtained. These results will probably encourage further similar attempts.

The maize crop for the year is estimated at 8,000,000 tons and the quality is said to be good. The shortage of forage in Europe has had a tendency to raise the prices. A drawback in connection with the shipment of this product is the high freight rates resulting from the congestion at the port of Buenos Aires and the coal strike in England.

New iron and steel company.—A cable from London reports the formation of the firm Pedro Vasena & Sons, iron founders and importers, into a limited liability company under the title of the Argentine Iron & Steel Manufacturing Co., with a capital of \$6,569,775 (United States gold). The head offices of the company will be in London.

Port congestion.—An effort has been made by the authorities to alleviate the congestion at this port. Several new warehouses have been put into service, although not yet finished, and certain goods are to be permitted prompt dispatch from the ship to the warehouses. Certain ships are to be sent to La Plata to discharge, and the goods will be sent to Buenos Aires by rail.

Nahuel Huapi Railway.—The construction of the new Nahuel Huapi Railway, with its extensions across the Andes, is well advanced on the Argentine side between Port San Antonio and Port San Carlos de Bariloche, and the work may be completed within two years.

The survey from San Carlos de Bariloche to the Chilean frontier has been completed by Mr. Willis, the United States engineer commissioned by the Argentine Government.

THE SICILIAN LEMON CROP.

[From Consul Hernando de Soto, Palermo, Italy, Mar. 21.]

The following information in regard to the lemon crop in Sicily for the 1911-12 season was supplied by the president of the Citrus Chamber of Palermo:

While the less abundant flowering during the spring of 1911 already pointed to a rather short lemon crop, the general conditions continued unfavorable as the season advanced. The prolonged and excessive heat during the summer months did considerable damage, checking the development of the fruit, much of which withered and dropped off. The lack of rain chiefly affected the sections where artificial irrigation is not available, the number of groves with good irrigation facilities being comparatively small. It is not believed that the total crop (in number of lemons) will exceed 75 per cent of that of last season.

The rainfall during the autumn and winter, which is usually abundant, was very small; in fact, it was one of the driest winters experienced for many a year. As a result the fruit ripened very slowly and remained small in size, so that, in weight, the crop is expected to be fully one-third under that of the preceding year.

Owing to the brisk demands for lemons and the consequent rapid increase in prices, picking was started rather early, the growers being convinced at the same time that the fruit would not improve even if left longer on the tree. The short crop, however, will not make it possible to satisfy the exceptional demand for the large-sized fruit, which is steadily rising in price.

As practically no rain fell during February and March, 1912, and as not much rain can now be expected until the hot season sets in, it is feared that the groves will suffer considerably during the coming summer on account of the scarcity of the water supply.

The prices quoted according to the last weekly bulletin of the Chamber of Commerce, dated March 16, 1912, are as follows, per box, comparisons with the prices prevailing at the same time in 1911, being in parentheses: First quality, \$4.05 to \$4.82 (\$2.90 to \$3.45); second quality, \$3.47 to \$3.86 (\$2.30 to \$2.70); third quality, \$2.70 to \$3.47 (\$1.95 to \$2.30).

BRAZIL'S FLOUR TRADE.

[From Consul Geo. H. Pickerell, Para.]

As a flour market Para offers many difficulties; not that buyers are insensible to price reduction, but they are largely influenced by friendship and by their own and their workmen's knowledge of and experience with certain brands of flour. It is not an easy matter to induce them to change to a new brand, for experimenting therewith may be costly enough to offset any price advantage offered. In addition, a temporary reduction in quotations is not regarded as an inducement, as repeat orders at equal prices are at times refused or accepted only after a considerable expenditure of money in cable tolls. The flour trade in this city is in the hands of two or three firms which obtain their principal supplies from two manufacturers in the United States.

While American flour much exceeds in quantity that imported from Buenos Aires (Para's imports of flour from New York City amounted to 11,096,492 pounds in 1910 and 10,589,332 pounds in 1911, in contrast to 1,597,838 pounds in 1910 and 1,329,460 pounds in 1911 from Buenos Aires), Argentine flour has some advantage in this market. It is said to be handled through one house in Buenos Aires which, because it thus controls the trade, is able to secure a very low freight rate for a stated tonnage per year.

A first essential for any American miller desiring to establish his brand in Para would seem to be local representation.

ITALIAN HEMP CROP.

[From Consul William W. Handley, Naples.]

The 1911 hemp crop of Naples, Italy, compared satisfactorily in quantity and quality with that of the two preceding years, amounting to 30,000 to 31,000 tons, against 27,000 tons in 1910. About one-fifth of the crop was injured in color by rain during retting.

The market developed toward higher prices from the beginning, owing to a lively demand here at the start, on account of the small crop in northern Italy. Speculators profited largely and the land owners and growers obtained exceptionally high prices. The prices at the opening of the season in August were \$195 per metric ton for light-colored and \$178 for discolored "I Paesano Extrissimo," f. o. b. Naples, cash less $1\frac{1}{4}$ per cent discount, and reached their maximum of \$253 and \$282, respectively, in October. The continuous advance and excessively large business done exhausted the buyers and allowed the market to become easier, so that prices dropped to \$243 for light-colored and \$219 for discolored at the end of December.

As about three-fourths of the crop has been shipped and the remaining stocks amount to only about 7,000 tons, reductions in prices do not seem probable, particularly as many mills are still not fully supplied. Business in tows and strappaturas was equally lively from the beginning of the season and the stocks are now much reduced. The quality was generally considered satisfactory.

Hecklers were well occupied, but the prices obtained were unsatisfactory and did not correspond to the high cost of raw hemp. When raw hemp is very high the heckled product finds flax a dangerous competitor.

GAS LIGHTING FRANCHISE IN GERMAN CITY.

[From Consul Robert J. Thompson, Hanover.]

The Imperial Continental Gas Association of London recently contracted with the city of Hanover to pay 10,000,000 marks (\$2,380,000) for an extension of its franchise to 1950. Hanover proper has slightly over 300,000 population. Under the old franchise the company paid the city a royalty of 3 pfennigs (\$0.0071) on each cubic meter of gas sold to the consumers, which is to be increased after 1925 to 4 pfennigs (\$0.0095). If the consumption exceeds 55,000,000 cubic meters, the royalty is to be $4\frac{1}{2}$ pfennigs (\$0.0107), and if exceeding 70,000,000 cubic meters, 5 pfennigs (\$0.0119) per cubic meter. At the conclusion of the contract which was to run until 1925, the works, mains, offices, etc., were to be turned over to the city, but the city was to provide the capital for extensions and improvements during the last five years of the contract wherever expenditures exceeded 50,000 marks (\$11,900).

In the new contract the city grants the substitution of a calorific test instead of an illuminating power test, the removal of the sulphur restrictions, and the introduction of a uniform price of 14 pfennigs (\$0.0333) per cubic meter with discounts according to quantities used.

Public lighting is to be free and may be increased by 200 lights annually. All property is to be handed over to the city free of charge at the expiration of the franchise. In case another gas plant is needed the city contracts to furnish the site with rail and water connections free to the company.

ITALIAN MILITARY AEROPLANE COMPETITION.

[From Vice Consul General James B. Young, Genoa.]

Il Sole, a commercial and financial newspaper of Milan, announces that a military aeroplane competition will be held by the War Department of the Italian Government, in which over \$100,000, including the contract for constructing 10 aeroplanes, will be awarded to the aeroplane firm which wins the first prize. The program of the contest has been arranged by the inspection office of the aeronautic service (l'ufficio di ispezione per i servizi aeronautici). Participation in the competition is reserved to Italian firms and builders of aeroplanes which have well-established works in the Kingdom of Italy and to foreign firms and builders which have legal representation and well-established works here. Applications should be sent to Ministero della Guerra, Rome, not later than December 1, 1912. Requests for further information should also be addressed to that office. The aeroplanes must be constructed in Italy; the motors can be of foreign make, but in awarding prizes Italian-made motors will be given preference, other things being equal.

AGRICULTURAL MOTORS IN ALGERIA.

[From Consul William H. Hunt, St. Etienne, France.]

The Department of Agriculture and Colonization of Algiers announces that experiments will be made with motor agricultural machines, May 27 to June 15, 1912, in the regions of Setif and Mitidja, and later in the Department of Oran. These are open to all makers of such machinery who desire to participate.

The tests will be under the supervision of a committee appointed by the governor general of Algeria, the object being to practically and theoretically demonstrate the value of tillage by mechanical traction. So far as the sum allotted permits, the governor general will grant free transportation from a French port to the railroad station nearest the experiment fields. Applications will be received up to April 30 by Monsieur Stotz, Directeur de l'École d'Agriculture, Maison Carrée, Algiers, Algeria.

MARKING CASES FOR MALTA.

[From Consul James Oliver Laing, Valetta.]

Complaint has been made at this consulate that packing cases containing fragile goods arrive here with the usual "Glass; handle with care" in English only. Practically all goods are landed here by means of lighters and sometimes receive rather rough handling, as the men who handle the goods do not always read English. It would be wise for American shippers to put the caution against rough handling in both Italian and Maltese. As Maltese is a distinct language, spoken by few outside the Maltese Islands, the following phrases in Maltese may be of use to American shippers to Malta:

Glass. Handle with care.—Hgieg. Immaniggiaua bil grazia.

This side up.—Din innahha fuk.

Stand edgewise. Do not allow to lie on flat side.—Kedua addeiak. Thalluix az-zak.

Keep dry.—Zomma finniexef.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8638. Hand grain seeders.**—An inquirer in Germany wishes to hear from an American manufacturer of hand broadcast seeders for grain, and he furnishes an American consulate a cut to give an idea of what he is seeking. The cut, which can be obtained from the Bureau of Manufactures, represents a German machine which is said to cost about \$16. He wishes a cheaper American sower with a canvas container instead of a tin hopper. Correspondence with this person should be in German.
- No. 8639. Accessories for furniture making.**—An American consular officer in a European country reports that a local importer, prepared to give good references, wishes to be put into direct communication with American manufacturers of horsehair, springs for chair cushions, hemp bands, and other accessories for furniture making, of which he states there is a demand in the country in question.
- No. 8640. Glass gramophone disks.**—A citizen of Moravia has recently perfected a glass gramophone disk to supplant the composition ones now in use. He claims many advantages for these disks over the present ones. Persons wishing further information should communicate direct with the inventor.
- No. 8641. Acids and vegetable oils.**—An American consular officer in a European country requests that he be supplied with the names of large American manufacturers of lime, tartaric, citric, and lactic acids, and of castor, sesame, and ground-nut oil. He states that he has inquiries for all of these articles and wishes to have the names of manufacturers who want to export.
- No. 8642. Blowers and driers.**—A business man in a Mediterranean country, who states that he is in a position to furnish first-class references, advises an American consulate that he is anxious to enter into correspondence with leading American manufacturers of blowers and driers for industrial purposes not now represented in Europe with a view to representing them and making purchases direct. Correspondence may be in English.
- No. 8643. Silk shoe laces.**—An American consular officer in a European country reports that he has an inquiry from a local importer, prepared to give good references, who wishes to be put into direct communication with American manufacturers of silk shoe laces. He writes that there is a good demand for this article.
- No. 8644. Metal ceilings.**—An American business firm writes to the Bureau of Manufactures that one of its correspondents in a South American country desires to get in touch with American manufacturers of metal ceilings and would like to hear from such firms as soon as possible.
- No. 8645. American specialties.**—Two American business men, resident in a European country, contemplate opening an American novelty and specialty office as a side line to their other business. The public is especially interested in American products of every description, and it is the intention of these men to carry at first a small line of various hardware, electric, and optical specialties, shoes, canned fruits, vegetables, preserves, meats, toilet articles, soap, tooth powder, talcum powder, etc. They will also take the agency for portable engines, vacuum cleaners, rowboats, canoes, sporting goods, etc. They inform an American consular officer that they desire to get into communication with manufacturers of these different products and solicit catalogues and price lists. Correspondence should be in English.
- No. 8646. Pitch pine.**—An American consul reports that a European business man desires to be placed in communication with wholesale dealers in pitch pine. Prices should be distinctly stated and dimensions should be given.
- No. 8647. Trinidad asphalt.**—A foreign business firm has written to an American consular officer in the United Kingdom that it desires the names of American firms dealing in Trinidad asphalt of purest qualities. Correspondence should be direct with the inquirer.
- No. 8648. Telephone protectors.**—Tenders will be received at the office of the Deputy Postmaster General, Melbourne, Australia, until May 14, for the supply of 1,200 telephone protectors. Local representation is necessary.

- No. 8649. Water supply and drainage systems.**—Tenders for the installation of water supply and drainage systems in Funchal, Madeira, will be received by the Municipal Board, Funchal, Madeira, until June 22. Local representation is necessary.
- No. 8650. Graving blocks.**—The Harbors and Lights Administration, Alexandria, Egypt, requires 50 cast-iron graving blocks for dock. Particulars, form of tender, and general conditions governing this contract may be obtained from "Administration des Ports et Phares," Alexandria, Egypt.
- No. 8651. Gas plant, etc.**—Tenders are invited by the Barry (Glamorgan) Urban District Council for the supply and erection of a water gas plant, the estimated cost of which is placed at \$14,599, and a condenser, washer, and sulphate plant, for which the estimated cost has been fixed at \$29,199. Further particulars are not given.
- No. 8652. Battery telephones.**—The Postmaster General, Perth, Western Australia, has issued a call for tenders for the supply of common battery telephones (schedule No. 190). Details are not supplied.
- No. 8653. Motor car, etc.**—Tenders are invited by the city council, Melbourne, Australia, for the delivery of one electric motor car and two electric motor wagons. Particulars, form of tender, and general conditions governing the contract obtainable from the Town Clerk, Melbourne City Council, Melbourne, Australia. Tenders must be received by the town clerk not later than May 15, 1912.
- No. 8654. Cable and switchboard.**—Forms of tender may be obtained of the Postmaster General, Melbourne, Australia, for supplying 24½ miles of paper-insulated lead-covered cable; 12½-pound conductors, 52, 26, 13, and 10 pairs (schedule No. 672, spec. No. 369); 30 miles of paper-insulated lead-covered cable (schedule No. 671, spec. No. 369); 699 relays, nonpolarized, 150 ohms resistance. Tenders must be received by May 21, 1912. The same official will receive, not later than July 23, 1912, tenders for the supply of nine sections of lamp-signaling trunk-line switchboard.
- No. 8655. Supplies for the Roumanian Government.**—American Minister John B. Jackson, of Bucharest, reports that bids are invited by the Roumanian Government for the following supplies: (1) The Director of the Hydraulic Service of the Ministry of Public Works desires proposals to supply the needs of that service for the fiscal year 1912-13. About 96,000 francs will be available for the purchase of copper, wire, nails, iron, steel, cord, electric lamps, brick, etc. (2) The Ministry of War invites bids for considerable quantities of pyrotechnic supplies of various kinds, electric carbons, lamps, etc. (3) After various conferences with representatives of the petroleum interests the Government has practically decided to proceed with the construction of a pipe line from the oil district to Constantza, on the Black Sea.
- No. 8656. Boilers.**—Tenders addressed to the Crown Agents for the Colonies, Whitehall Gardens, London, S. W., England, will be received until May 10, 1912, for the manufacture and delivery f. o. b. Liverpool, of the following machinery for the Crown Agents for the Colonies (acting on behalf of the Government of Southern Nigeria): Four Lancashire boilers; two well pumps, capacity of each, 5,000 gallons per minute; two triple-expansion, surface-condensing vertical engines for working well pumps; three triple-expansion surface-condensing vertical engines and pumps, capacity of each 1,667 gallons per minute, together with economizer, condensers, steam and water piping, feed pumps, air pumps, and all accessories according to specifications and plans, which can be obtained at the office of the Crown Agents for the Colonies.
- No. 8657. Grain elevators.**—The municipality of Antwerp, Belgium, invites tenders until May 7, 1912, for two floating pneumatic grain elevators. Particulars, specifications, and conditions of contract can be obtained at the Hotel de Ville upon application.

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.

GOLD AND PRECIOUS STONE MINING AND JEWELRY IN SIAM.

[From Vice Consul General Carl C. Hansen, Bangkok.]

Gold is found in the alluvial sands in many districts of Siam and is washed out in small quantities by the natives.

The Kabin gold mine in eastern Siam was taken over by an English company some years ago, but, although the mines were worked to their full extent under the supervision of Cornish miners and Scotch engineers, no results were obtained and the company failed. Up to the present, the working for gold in Siam by Europeans has not been successful, and the native gold-mining industry is of little importance.

Production of Precious Stones.

Some years ago it was estimated that five-eighths of the world's supply of sapphires came from the alluvial workings of southeastern Siam, where these gems have been washed for by Shans and Burmese for many generations. Statistics as to the yearly amount of sapphires produced are not available, as these gems are free of both inland taxes and export duties. The customs reports show that for the fiscal year 1910 only \$433 worth was exported, going to Switzerland, but the customs also state that there is reason to believe that considerable quantities are exported by parcel post and of such there is no record.

Rubies are found in the districts of Chantabun and Krat in eastern Siam, but those of good color are small, while the larger sized ones are of poor color, but it is said that the better quality of rubies are sent overland to Burma and are there sold as Burmese rubies. According to the customs, the exports of rubies for last year amounted to \$11,100, but, as in the case of sapphires, this amount does not cover the amount which left the country through other channels.

The gem industry is in the hands of Burmese and Shans, and the alluvial deposits are washed by hand in the streams. The trade in gems is chiefly carried on by natives of India, Burma, and Ceylon.

Imports of Jewelry.

The total value of the jewelry imports into Siam for the fiscal year ended March 31, 1911, amounted to \$531,178, against \$634,998 for the previous year. During this period, however, the United States failed to make any direct contribution to these imports, which consisted of gold, silver, and plated jewelry to the amount of \$148,522, mounted precious stones to the value of \$114,416, and unmounted precious stones valued at \$268,240. The imports of the gold, silver, and plated ware and mounted precious stones were for the greater part supplied by the United Kingdom and Germany, while France and Belgium contributed the main part of unmounted precious stones.

The import duty on all kinds of jewelry is 3 per cent ad valorem.

White rum, tafia, a cheap product, is drunk by the poorer classes in Haiti, Consul John B. Terres, of Port au Prince, stating that a higher quality of rum sells at four times the price and is used by the public in general.

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COMPETITIVE MARKETS FOR CEMENT.

[From Consul George Eugene Eager, Barmen, Germany.]

Westphalian Cement Syndicate.

The cement industry in west Germany is practically controlled by the Rheinisch Westfälische Zement Syndikat, with the principal office at Bochum in Westphalia. This syndicate embraces some 35 or more cement manufactories, and fixes prices and has a monopoly of the trade for west Germany. The results of the combine have not been so satisfactory as had been expected, on account of the rivalry of the Belgian cement manufacturers, who by reason of exceedingly cheap water rates to this part of Germany can deliver their product here at a low figure. This competition has kept down the prices for cement and there seems to be little hope for improvement at present.

Correspondence with the syndicate in regard to the use of white cement in Germany would seem to indicate that there is no pure-white cement in the market. I was referred to the Portland Zement-werk Wetzlar as the only firm that made a white cement. It is said to be exceedingly difficult and expensive to render ordinary Portland cement white and for pure-white work the darker Portland cement is not usable. Therefore an effort is made to produce as light-colored cement as possible. A cement manufactured by the above factory is not white but of a very light color. It has been used for many kinds of artificial stone, sandstone, etc., and it is not much more expensive than the ordinary Portland cement.

At the present time a large percentage of all building construction is being executed in ferroconcrete and therefore the demand for cement is increasing. Great improvement has also been made in artificial building stone, some of which can scarcely be distinguished from the real. For this work a much higher-grade cement is used and the price is probably a third more than for the ordinary quality.

[From Consul George Nicholas Ifft, Nuremberg, Germany.]

The Situation at Nuremberg.

The use of cement in Nuremberg and throughout all Germany is large and is growing, especially in connection with building operations. Concrete (known here as "Beton") figures more or less in practically

all new structures, as well as in bridge building, railway construction, and street and road improvements. Stucco work, often with elaborate decorative effects, is still much in favor throughout Germany. Cement is also finding enlarged use in the construction of ornate fountains, monuments, etc.

While it is true that Germany imports small quantities of cement (the figures for 1911 were 253,023 metric tons, valued at \$1,565,800), this practically all comes from Belgium, Denmark, Austria, and France, and from factories located close to the borders. A very small amount comes from England. Foreign cement does not constitute 5 per cent of the total used here.

Germany is, however, a large exporter of cement, and so far as my information goes is able to compete with the world in quality. As a matter of fact, German cement is exported to the United States in considerable quantities, although shipments vary from year to year.

German Export—Small Demand for Foreign Cement.

During 1911 Germany exported 845,850 metric tons of cement, valued at \$6,319,376. The principal foreign purchasers in the last two years were:

Countries.	1910	1911	Countries.	1910	1911
	<i>Metric tons.</i>	<i>Metric tons.</i>		<i>Metric tons.</i>	<i>Metric tons.</i>
United States.....	14,110.5	20,093.0	Helgoland.....	11,601.0	16,269.3
Argentina.....	36,375.3	47,736.6	Mexico.....	41,392.5	12,925.8
Australia.....	21,021.2	35,750.1	Netherlands.....	115,099.3	119,980.8
Austria-Hungary.....	54,036.7	53,082.6	Norway.....	10,047.5	10,222.6
Belgium.....	21,498.5	14,408.4	Philippine Islands.....	5,087.4	7,683.1
Brazil.....	92,384.6	115,664.5	Russia.....	24,945.5	43,153.8
Chile.....	42,668.1	66,373.3	Sweden.....	9,196.5	17,458.3
Denmark.....	11,406.3	11,861.6	Switzerland.....	1,384.3	13,307.1
Dutch East Indies.....	41,283.0	36,352.9	Turkey (European and Asiatic).....	16,912.6	25,598.1
Finland.....	37,352.1	42,831.4	Uruguay.....	10,857.4	21,559.3
France.....	14,537.5	27,383.9			
German East Africa.....	7,158.5	10,853.6			

In view of these figures and as result of personal interviews with users of cement I do not think that a market could be found for American cement in the Nuremberg district unless it were a special and superior product, peculiarly adapted for ornamental stucco work, and even then it would find very small demand, as the home product is itself of very high grade.

[From Consul Herman L. Spahr, Breslau, Germany.]

The Portland Cement Industry in Silesia.

The first Portland cement factory in Silesia was erected in 1857. There are now 11 important Silesian factories, whose total output amounted in 1910 to 4,040,000 barrels of 170 kilos (374.8 pounds) net weight each. They are now all united in a protective combination styled the Verband Oberschlesischer Portland-Zementfabriken. All of these works are in or near Oppeln, whose great limestone beds are well known as especially suitable for the production of an excellent cement. The nearness of the Upper Silesian coal mines was also a factor in the rapid development of the industry at Oppeln. The present market for Silesian cement is mainly in eastern Germany and the northeastern part of Austria-Hungary. Formerly there were large exports to Russia and the Balkan States and sometimes oversea.

The 11 factories employ 2,800 workmen, an average of one man for every 1,443 barrels produced annually. In 1888, 5 factories employed 1,600 men and produced 777,000 barrels, one man for every 485 barrels. In comparing these figures it must be remembered that the factories carry their own masons, smiths, carpenters, etc., on the pay roll for repair work only. It is only recently that the last four works joined the combine. The competition of the Berlin works has prevented any rise in prices as yet in middle Germany, the average obtained by the factories being about 3.25 marks (77 cents) per barrel, including packing.

In view of the active industry in Silesia and the difficulty of competing with low prices, it is hardly likely that American cement has a chance here. However, there is a strong demand for white Portland cement, which is usually obtained from Stettin. American concerns may be able to do business in this line with the Breslau dealers, whose addresses are obtainable from the Bureau of Manufactures. Prices should be quoted for delivery at a German port.

SYRIAN MARKET FOR CONCRETE-BLOCK MACHINERY.

[From Consul General W. Stanley Hollis, Beirut.]

At different times during the past year this consulate general has been in receipt of letters from American manufacturers of concrete-block machines. These letters, together with the catalogues which accompanied them, have been shown to a number of interested firms in Beirut, without, however, any practical results, for the reason that the American machines are entirely unknown and untried here, and for the additional reason that exporters in the United States will sell only for spot cash, being unwilling either to extend credit or to send on consignment or on trial.

A French concern which has been very successful in introducing its concrete-block machines in this market first sent one on approval and gave the consignee one year to pay for it provided it was acceptable to him; and not only was the importer of this particular machine pleased with it, but he considered it so useful that he ordered four more like it. This French company, the name of which is obtainable from the Bureau of Manufactures, is in a fair way to capture a great part of Syria's trade in these machines, and if the American concerns which have at different times written to this office asking its assistance in the introduction of their machines really wish to obtain a foothold here it will be necessary for them to follow the plan of this successful French firm.

An Excellent Field for American Machines.

There is undoubtedly an excellent field in Syria for the sale of these machines, and there is no reason why a considerable number of American machines should not be sold, as the inhabitants here are well disposed toward American manufactures.

The American-Syrian Chamber of Commerce, Beirut, is in position to secure a goodly share of the orders for these machines for American manufacturers provided the said manufacturers will follow its suggestions, which are that a complete machine, together with all the necessary molds, be sent to the chamber for exhibition. If this is done, its secretary, who has posted himself on this subject through

interviews with the leading building contractors in Beirut, has guaranteed that the chamber will do its utmost to open up a trade in these machines, as he feels confident there is a good market for them here. Manufacturers interested in this proposition may write either to the secretary of the American-Syrian Chamber of Commerce direct or through this consulate general.

CEMENT PRODUCTION OF THE UNITED STATES.

In 1910, according to the report issued by the Geological Survey, the production of Portland cement in the United States reached 76,549,951 barrels, with a value of \$68,205,800. This is equivalent to 12,986,152 long tons, valued at \$5.25 a ton. It is an increase over the output for 1909 of 11,558,520 barrels, or nearly 18 per cent, and an advance in value of \$15,347,446, or more than 29 per cent. This increase alone is greater than the total output of Portland cement in 1900. In addition to Portland cement there were also produced 1,139,239 barrels of natural cement and 95,951 barrels of puzzolan cement, a total of 77,785,141 barrels.

The price of Portland cement in 1910 was as low as 73 cents a barrel in some places, the average for the United States being 89.1 cents a barrel. In 1890 the average price was over \$2, and as late as 1903 it was \$1.24 a barrel.

GASOLINE ENGINES IN SOUTH AFRICA.

[From Consul Edwin N. Gunsaulus, Johannesburg.]

In the agricultural parts of this consular district there is a good sale for portable gasoline engines, from 1½ to 4½ horsepower, complete, with cooling tank, mounted on portable platforms. These engines are principally used for pumping and feed cutting. There is also a fair sale for stationary gas engines of 10 to 30 horsepower for driving stamp batteries in some of the smaller mines of the outside districts of the Transvaal.

In Johannesburg and in practically all of the Rand districts where current is procurable electricity is used for motive power by the different companies engaged in manufacturing and engineering pursuits, as the required installation is less expensive than with individual power plants.

Few engines are used in this district for traction plowing, although there are occasional demands for them as a result of outbreaks of East Coast fever, which cause considerable mortality among oxen, thus necessitating the substitution of traction plowing. It is stated that the cost per acre of traction plowing is \$1.10, owing to the high price of oil, against 67 cents when oxen are employed.

There are many types of gas and gasoline engines on the market here, principally of British manufacture, and practically all of the machinery houses have agencies for these lines. The sales, however, are not very large. Windmills are almost entirely employed for pumping purposes on the farms.

The names of firms dealing in general and agricultural machinery most likely to be interested in stationary and portable gasoline engines are appended [and may be obtained from the Bureau of Manufactures].

PAINTING CEMENT BUILDINGS IN GERMANY.

[From Consul General Robert P. Skinner, Hamburg.]

The publication in Daily Consular and Trade Reports for January 3, 1912, of an article on building methods in Hamburg prompts inquiry in regard to the class of paint used on cement structures in Germany. It is claimed that large amounts of money are expended in the United States in painting cement and concrete, with unsatisfactory results, the paint either peeling or discoloring rapidly.

According to information obtained from builders and architects, the principal precautions taken in northern Germany to prevent the peeling of oil paints is to defer their application until the cement is quite dry. When it is intended to apply color on outside walls which are still damp, water paints are used which are weather proof and which can be washed if necessary. These colors, necessarily, are not impervious to moisture.

In his textbook for 1910 Dr. Glinzer, director of the State Building School in Hamburg, says that to make oil paint adhere to cement the surface of the material should be coated with diluted sulphuric acid (1 part concentrated acid to 100 parts of water), which afterwards must be washed off and the surface allowed to dry. Or the surface may be covered with diluted silicate of soda (wasserglas), the solution to be 1 to 3 or 1 to 4, and applied three times in succession. Still another method is to apply two coats of building "fluat" at least 24 hours apart. Practical builders state, however, that the applications of sulphuric acid are not made by them, and that such success as they have results merely from careful work and the use of good materials.

Methods of Applying Oil Paints.

Dr. Glinzer also says that oil paint should be applied to cement in the following manner: The surface is given one coating of linseed-oil varnish, to which is added a first coat of white lead when the varnish is dry. A second coat is then added, also containing white lead together with more or less coloring matter, as the building laws forbid the use of absolutely white paint on the exterior of structures. In this climate the use of oil paints is recommended, as they are waterproof and present smooth surfaces which attract a minimum of dirt. Painting according to this method costs here about 10 cents per square yard.

Applied to iron, linseed-oil varnish when used by itself flakes off readily. It should be thoroughly mixed with red oxide of lead, caput mortuum, or ocher graphite. This mixture serves as a first coat after the perfectly clean and dry surface has been gone over with the ordinary hot linseed-oil varnish. When the dead color has dried, another coat of the color desired is applied. The oil, being partly converted into resin, combines with the coloring material, making a thick coating that is the more impervious to water accordingly as the color is finely ground or not. Lead should be used when the paint is exposed to water.

The water colors so frequently used in Germany as a rule have silicate of soda as their base. These colors can be used on cement, plaster of Paris, brick, or glass. Liquid casein paints are easily worked and are said to be durable. The discoloration of cement buildings results very frequently from the class of cement employed rather than from the color applied afterwards.

THE PHILIPPINE EXPOSITION.

[From Consul General George E. Anderson, Hongkong.]

The exposition held at Manila during the first half of February in connection with the annual carnival is pronounced by all commercial interests concerned to have been a notable success. Visitors to the islands from many sections of the Far East were in larger number than ever before.

The exposition was unusually effective not only in its presentation of the great variety of native products to visiting business men and others interested, but also in the presentation of foreign, and especially American, products to native planters and capitalists.

Machinery Hall.

The central feature of the exhibit of foreign goods was Machinery Hall, wherein Manila firms representing American and other foreign houses displayed, in the 32,000 square feet of floor space available, their more attractive and novel lines of machines and appliances. There were shown many kinds of electrical appliances, such as those for heating, lighting, and cooking, private telephone and telegraph instruments, and similar goods, as well as heavy generators and dynamos and many electrical novelties; contractors' machinery with flat and dump cars of various models, hoisting machinery, ditching machinery, and the like; several miniature water systems for local water supplies, with steam, kerosene, and gasoline engines of various sorts pumping water into tanks; sawmill installations with steam, gasoline, and kerosene power; acetylene lamps for houses and for automobiles, welding apparatus, and several models of improved generators; exhibits of agricultural implements, including rice hullers, straw elevators, and trussers in operation; ice plants in operation; various displays of concrete mixers, concrete block machines, and other concrete and cement machines; a display of steam rollers for roads.

There was in operation a miniature gas plant, which is to be used by the Bureau of Science after the exposition and is designed to burn Batan (Philippine) coal. An elaborate exhibit of diving apparatus was to be seen; likewise a splendid display of various tools, implements, and miscellaneous hardware from American houses, and motors, engines, pumps, and machines for various purposes operated by steam, gasoline, or kerosene. In short, there was a comprehensive display of all lines of machinery which those experienced in Philippine trade offer as suitable for use in the archipelago. It is a significant fact that a large portion of the machines are for small plants and with individual power—either gasoline or kerosene. Kerosene power has many advantages over any other, not only in the Philippines, but also in China.

Native Goods—May be Made a Biennial Event.

The exhibits of native goods of the various Provinces included mostly agricultural products, there being not only fine displays of rice, sugar, hemp, tobacco, coconuts, rubber, peanuts and other nuts, fruits, skins, and fish, but also corn, vegetables, and other Temperate Zone products, including cotton. There were also displays of the immense tobacco factories, of various woven fabrics like pina and jusi cloth, mats, hats, pottery, baskets, carved woods, furniture, saddlery, embroideries, shellwork, and native work generally.

There is some doubt as to whether the exposition will be held next year. By reason of a disagreement as to the amount of money to be voted and because the matter was brought forward too late in the session, the Philippine Legislature failed to make appropriation of the 100,000 pesos (\$50,000) needed for the enterprise. There is also on foot a movement to hold the exposition once every two years instead of annually and to organize it on a larger scale; so it is possible that, even if the finances of the enterprise can be arranged, no exposition will be held until 1914. The success of this year's undertaking, however, indicates that the enterprise merits the attention of American manufacturers of those lines of goods which the Philippines need.

American Firms Among the Prize Winners.

In its February issue the *Far Eastern Review* states that prizes for the machinery exhibit at the Philippine Exposition of 1912 were awarded to the following firms, the first prize carrying with it a gold medal, the second prize one of bronze:

Machinery exhibit—F. L. Strong; Germann & Co. Sugar-cane crusher—Bahman Iron Works; George L. Squier. Rice machinery—F. H. Schule (Ltd.); Bernard & Leas. Metal-working machinery—Manning, Maxwell & Moore. Electric generators and motors—General Electric Co.; Siemens-Schuckert Works. Woodworking machinery—Crescent Machinery Co.; Kirchner-Leipzig. Sawmill machinery—American Sawmill Co. Acetylene illuminating and welding apparatus—Philippine Acetylene Co. Technical equipment—Siemens & Halske; H. Maihak. Hand tools—Simons Manufacturing Co.; E. C. Atkins & Co. Portable engines and boilers—Gaar, Scott & Co.; Marshall, Sons & Co. Boiler-feed pumps—American Steam Pump Co.; Blake Pump Co. Pumping machinery—Fairbanks-Morse Co.; Gould Pump Co. Internal-combustion engines—Gasometer Fabrik Deutz; Meitz & Weiss. Road roller—Buffalo Steam Roller Co. Electric household novelties—General Electric Co.; Domestic Equipment Co. Ice machinery—York Manufacturing Co.; Remington Machine Co. Blowers—American Blower Co. Stationary engines and boilers—James Lefel & Co. Rock crushers—American Road Machinery Co. Concrete mixers—Ransome Concrete Machinery Co. Industrial railroads and rolling stock—Orenstein & Koppel. Fire engines and extinguishers—Howe Engine Co.; American La France Fire Engine Co. The following firms received honorable mention: The Vacuum Oil Co., lubricating oils; Dearborn Drug & Chemical Co., boiler compounds; Barburn, Bernard & Lurenne, lantern lenses; A. J. Morse & Sons, diving outfits, submarine; Fairbanks-Morse Co., windmills; Ingersoll-Rand Co., pneumatic tools; Siemens-Schuckert Lake Works, switchboards; Dodge Manufacturing Co., transmission supplies; A. E. Decouffi, cigarette machine; Empire Plow Co., agricultural implements; Rifle Engine Co., hydraulic rams.

Consular Trade Conferences.

Consul Henry D. Baker, of Hobart, Tasmania, is returning to the United States via Honolulu on leave of absence, and expects to arrive at Seattle, Wash., about May 29. He will remain a week in that city, Tacoma, and vicinity, and while in that part of the country may be addressed in care of the Dexter Horton Bank, Seattle. He plans to arrive at Minneapolis, Minn., about June 9, where he may be addressed in care of Mr. Howard W. Baker, manager, Butler Bros., Butler Block, Minneapolis. The consul will be in Chicago, Ill., about June 15, where he will remain for several weeks, and may be addressed in care of the University Club of that city. Mr. Baker expects to be in New York, Washington, and perhaps several other eastern cities around July 1. Commercial organizations and business men in the East who desire to arrange for conferences with the consul should communicate with him at his Chicago address.

FAR EASTERN TRADE NOTES.

[From Consul General George E. Anderson, Hongkong.]

Panama Canal-Trans-Pacific service.—It is announced that the Glen and the Shire Lines of steamers will establish a trans-Pacific service in connection with the Panama Canal. At present the lines serve Europe and the Far East.

New Bank.—A number of the leading capitalists among the Chinese of Kwangtung (Canton) Province are planning to establish a large bank under foreign supervision and largely with capital secured from abroad upon local real-estate security.

Tramway for Canton.—The construction of a tramway, possibly an elevated railway, in Canton is one of the enterprises now being seriously considered by the Bureau of Communications there. At present the plans contemplate municipal, or, rather, provincial, ownership.

Siamese rice crop.—It is stated that the rice crop of Siam this season is such that outgoing freight will not amount to more than 500,000 tons for the year—a record of great importance not only to rice-consuming countries but to the shipping interests of the Far East.

Foreign piece goods.—While there has been a reduction in the quantity of piece goods arriving at Chinese ports, the stocks so far accumulated during the revolutionary troubles are among the largest in the history of the trade. However, there is reason to believe that the interior of the country is in need of foreign goods, and that when once such wares can be moved safely, from a financial as well as a transportation standpoint, clearances will be very rapid.

India's gold imports.—Financial circles of the Far East are particularly interested at the present time in the increase in the amount of gold now being absorbed by India. Preliminary reports indicate that the imports of gold into India during 1911 form a record, while those of silver amounted to about the same as in the previous year, thus demonstrating that the receipts of gold have not been at the expense of silver. It is considered by bankers that the increased use of gold is of vast economic importance both to India and to the Far East generally.

THE PHILIPPINES.

Sugar exports.—Owing to damage done by drought most Philippine authorities place the exports of sugar from the islands for the year at not to exceed 180,000 tons, and probably somewhat less. Sugar producers outside of Manila and vicinity are holding their crops for higher prices.

New pottery.—Arrangements are being completed at Manila for the erection of a modern factory for the manufacture of sand-lime brick, tiles, sewer pipe, drain tiles, pots, and various other ceramic products. The factory is to have a capacity of 50 tons per day. It is the enterprise of Cleveland (Ohio) capital.

Shipment from Zamboanga.—Exports from Zamboanga, the Moro Province port, for the year 1911 increased from 1,394,158 pesos (\$697,079) to 2,465,382 pesos (\$1,232,691). Over \$500,000 of the increase was in exports of hemp, but there was also an increase of more than \$125,000 in the value of lumber shipments. Of the \$284,000 worth of copra exported over 80 per cent was sent to foreign countries direct.

Hemp arrivals at ports.—Receipts of hemp at ports in the Philippines have been unusually large so far the present season. They represent accumulated stocks moved to take advantage of an advance in price, and it is expected that arrivals for the remainder of the season will be comparatively light. The general movement for the year, it is reported, will not be a heavy one.

TRINIDAD NOTES.

[From Consul Franklin D. Hale, Port of Spain, Trinidad, British West Indies.]

Petroleum industry.—Optimism prevails in most oil fields of Trinidad and among those largely interested in the many ventures. Operations at Point Fontin are progressing favorably and large steel storage tanks are being constructed by American contractors. Local sugar factories are being supplied with oil fuel from these wells. Promising work is also being done at Guapo. A new company with large capital is about to develop the field in the extreme southwest of the island. An American expert visited London in the company's interests, and under his direction large quantities of drilling machinery and supplies are being imported from the United States. The fact that a large share of the expert workmen in this special industry are from the United States partially accounts for the large importations of such American machinery. It is reported that the Central Oil-field at Tabaguite will soon erect a refinery for the production of petrol, etc., which it is claimed can be put on the market at less cost than the imported. The rapidly increasing use of automobiles, motor launches, etc., creates an increasing demand for these products, for which the crude petroleum is well adapted, the base being largely paraffin instead of asphalt.

Sawmilling.—A 40-horsepower boiler and a 30-horsepower engine made by Godfrey Keeler & Co., New York, and a carriage, saw, and accessories from the American Machine Co., has been recently installed in the Balata Bay district for manufacturing hardwood lumber. In this section of the island there is a large growth of balata and other tropical woods, and the promoters of the enterprise anticipate both a foreign and local demand for the lumber. As the roads are not suitable for hauling, the lumber will be shipped by lighters or barges to this city. A member of a New York firm is here investigating the possible hardwood trade with Trinidad, and has made business connections.

TELEPHONE SUPPLIES FOR MALAYSIA.

[From Vice Consul General D. Milton Figart, Singapore.]

In the Straits Settlements there are now 218 miles of telegraph and 7,321 miles of telephone wire. The Oriental Telephone & Electric Co. (Ltd.) operates in Singapore, and the Government elsewhere. The 2,018 miles of telegraph and 3,118 miles of telephone wire in the Federated Malay States are all Government owned. While the Government formerly purchased some supplies from the foregoing company, it is understood that the policy is now to purchase everything through the Crown Agents of the Colonies in London.

The market for telephone appliances is certain to extend, by reason of its adoption on the various rubber estates throughout the Malay Peninsula.

COTTON-GOODS TRADE OF CHINA.

[From Vice Consul General W. Roderick Dorsey, Shanghai.]

The condition of the American cotton-goods trade with China is such as to merit from every person interested in it, be he manufacturer, merchant, or middleman, the most serious consideration of its future. Competition from Japan has become formidable; year by year Nippon is increasing both the volume and the percentage of its exports to Manchuria and other portions of North China, thereby gradually diverting from the United States and Great Britain a market in which only a short time ago they were supreme.

The most striking features of the trade in 1910 were the serious shrinkage in the purchases of American and British plain fabrics, and the increased importation of Japanese goods of similar grades, which were laid down in Manchuria direct at prices well below the American product. China's imports of the leading plain cottons, i. e., gray and white shirtings, sheetings, drills, jeans, and T cloths, by principal countries of origin, for five recent years are shown below:

Kind.	1906	1907	1908	1909	1910
	<i>Pieces.</i>	<i>Pieces.</i>	<i>Pieces.</i>	<i>Pieces.</i>	<i>Pieces.</i>
British	10,785,227	8,224,951	8,963,534	10,491,448	6,511,126
American	8,544,185	578,647	1,581,989	3,856,231	1,385,219
Japanese	733,436	840,401	966,982	1,396,237	2,389,633
Indian	85,093	67,905	141,312	133,855	147,952
Total	20,147,931	9,711,904	11,708,817	16,077,831	10,433,990

The Rise of Japan as a Competitor.

As the trade between the United States and China is confined practically to the grades of cotton cloth included in this table it will serve to illustrate the striking features alluded to. The short supply of American cotton in 1910 is advanced as an explanation of this condition, prices for American lengths being too high to encourage free buying, and this was Japan's opportunity.

That Empire demonstrated its independence of the American raw-cotton market by turning its attention to China and India, and purchases from these countries were increased by 133,300,000 pounds. In addition to the increase of 993,396 pieces of the leading varieties of cloth, Japan also supplied China with 35,100,500 pounds more of cotton yarn to feed native looms. Because of the effect of high cotton on the American product Japan's increase during the year under review is doubtless more apparent than real; but the truth remains that every opportunity of this sort makes its impression, for the story of Japan's commercial advance in Manchuria is evidence of the fact that, once forward, it is not easily relegated to its earlier position.

It is beyond doubt the method of distribution adopted by Japanese traders in Manchuria that has primarily enabled them to make such inroads upon American cotton goods there. A brief sketch of how they have brought these methods into use may be interesting. The material for these remarks has been furnished by American and British middlemen in Shanghai, who for years have handled America's product, and now, seeing the business passing from them, seek reasons for their inability to control the market as of old.

Before the establishment of the South Manchurian Railway and before the Russo-Japanese war the cotton-goods trade in Manchuria was solely in the hands of Chinese merchants at Newchwang, who secured supplies from agents in Shanghai. At the close of the war Japan began its commercial activity in Manchuria, and, among many other products, placed cotton goods directly before the merchant, who in the past had done his trading through Newchwang houses and was financed by them. These merchants, however, made no response.

The Japanese decided that if the Newchwang merchant would not cooperate in the market they would come in and by trading direct with cheaper goods, on attractive terms, win a place.

Soya Bean an Important Factor.

About this time Japan realized that Manchuria had the soya bean in sufficient quantities to make it an interesting item of export, as well as a valuable medium of barter in Nippon's commercial dealings with the country people. Ready assistance was received from the most important business house in Japan, which completed an organization in Manchuria primarily to buy beans and, secondarily, to sell cotton goods turned out by its own mills. To-day it has more than 200 bean centers in the Province, each of which has become a distributing point for a certain quantity of cotton cloth. In this way even the local merchant, unwilling to talk business, was passed over and the consumer in town and village directly approached and educated to like the Japanese goods that were heavy and cheap. The merchant, seeing his customers buying freely from Japan, was forced to do likewise if he would continue in trade, and what he would not do willingly he was forced to do by the persistence and ingenuity of the Japanese trader.

And so the expansion of the scheme goes on, and its effect is felt even in Newchwang, where imports of American goods declined from 836,850 pieces in 1908 and 1,143,423 pieces in 1909 to 636,753 pieces in 1910. The Japanese side of the picture is an advance in these same lines from 205,600 pieces in 1908 to 297,660 pieces in 1909 and 408,554 pieces in 1910. In addition, Japan registers an increase in what is termed "cotton cloth" from 984,087 yards in 1908 to 3,273,802 yards in 1909 and 7,242,800 yards in 1910. The opinion of a well-known Shanghai middleman is that Japan's showing, while assisted in part by dear cotton and similar factors, is due primarily to the fact that a business without local organization has been supplanted by one that is organized.

American Sales Methods.

In contrast to this direct method of marketing, the American product is sold first to a foreign house in Shanghai, which sells to local agents of Newchwang firms, who in turn ship to the Newchwang merchant, who again sells to the Manchurian agent. Here we have four concerns that must make a profit or commission before the bales reach the consumer. In addition, the passage through Shanghai adds Shanghai charges, storage, transshipment, etc., in addition to profits and commission and the high coast freight rate to Newchwang, all of which add to consumer's cost and jointly represent a considerable portion of the 15 to 20 per cent excess at which American goods appear in that market.

I am fully aware of the fact that direct trade for American goods could probably not be accomplished so expeditiously nor so cheaply as with Japanese goods, but I am convinced that some method must be devised whereby the cost of marketing American cloths can be reduced and whereby closer relations with the native consumer may be established. If the merchant in the Manchurian centers could be induced to deal direct with the Shanghai importer, the profits of the Newchwang house and its agent in Shanghai would be eliminated and shipments could be made direct via Dalny, thus saving two handlings, at least; and if goods could be shipped at a through rate of freight from the United States via Dalny, an additional saving could be effected. The time has come when the business can no longer be handled solely through Newchwang with safety, and dealers should realize this and act accordingly.

One important American firm, which has access to a well-organized system of depots in Manchuria for the distribution of other wares and the purchase of tobacco, will enter the piece-goods market for the first time, representing southern American mills, and will use these established facilities for direct distribution. While this plan approximates that of the Japanese, it does not present the same advantage of barter and exchange that is presented by bean organizations. However, it is a move in the right direction, and the energy for which this organization is famous may overcome the disadvantage to some extent.

Native Product May Affect Foreign Grade.

An active advertising and direct-distribution campaign conducted through similar channels would certainly have effect, and American mills should devise the best means to make the work successful. The producer must get closer to the consumer to win him back to the cloth he once bought so freely. Japanese competition is healthy and very real and in this part of the world is taken seriously by merchants and importers as well as by consular officers. The sooner the producer and the American trade journals awake to the fact the better it will be for all concerned. Too much stress should not be laid on "unfair advantages," but serious and intelligent attention should be given to the real cause of the American loss in Manchuria—namely, superior organization.

A factor that may in time check Japanese expansion in this market is the growing competition of Chinese mills, and they should not be lost sight of as an additional competitor with goods from the United States. At the end of 1910 there were 33 cotton mills in operation in China, with 903,416 spindles and 3,805 looms. Although the year was a poor one, it has been estimated that these mills turned out 272,000,000 pounds of yarn and the equivalent of 1,140,000 pieces of 40-yard sheetings or drills. There is, in addition, the enormous output of hand machines throughout the country, which it is not possible to gauge, but each yard of which subtracts from the quantity needed from outside sources. Native competition will grow and with increased production of raw material China's output may, before many years, assume such proportions as to affect materially the trade of all countries.

There is serious competition to be met from Japan; there is growing competition with China; and, as is demonstrated through jeans, Great Britain can not be lost sight of. If the American cotton-goods

manufacturer is serious in his desire to maintain his place in China he must quote competitive prices when possible, must devise with his exporters effective means to meet the methods of competitors, and must get, through safe channels, into closer contact with the native consumer.

THE NETHERLANDS FLOWER-BULB TRADE.

[From Consul Frank W. Mahin, Amsterdam.]

The regular annual report of the General Society for Bulb Culture at Haarlem shows an increase of both imports and exports of bulbs in 1911 as compared with 1910. The exports, however, were less last year than in 1909, when they far exceeded any previous year, being nearly 18,000,000 kilos (kilo=2.2046 pounds). The report of the bulb society gives the following statistics of the Dutch trade in bulbs for 1910 and 1911:

Countries.	Imports from.		Exports to.	
	1910	1911	1910	1911
	<i>Kilos.</i>	<i>Kilos.</i>	<i>Kilos.</i>	<i>Kilos.</i>
United Kingdom.....	649,500	697,800	6,446,400	6,058,200
Germany and Austria.....	68,900	43,200	4,432,200	4,854,600
France, Belgium, Italy, Spain, Portugal, Greece, and Turkey.....	543,300	716,100	937,900	951,300
Scandinavia.....	1,200	3,000	1,725,000	1,684,300
Russia.....	1,900	400	578,500	615,400
Japan.....	100,900	99,900		
United States.....	152,700	137,200	3,071,100	2,938,900
Other countries.....		103,400	46,900	205,700
Total.....	1,518,400	1,801,000	17,238,000	17,308,400

The bulbs are tulips and hyacinths, with a few narcissus and others. Considerable quantities of bulbs not included in the above table were sent by parcels post, the use of which for transporting bulbs is constantly increasing. The countries named in the foregoing are those to which the bulbs were directly sent, and from which in many cases the bulbs may have been sent to other countries.

The table shows a decline of trade with the United States in both imports and exports. The decline of exports may be only temporary, as the 1911 quantity exceeded that of any year prior to 1909, but the decline of imports seems to be permanent, as it has been in progress since 1907, when the highest mark was reached. The 1911 total was the lowest since 1905.

At present (Mar. 27) the prospect for the 1912 crop of bulbs is excellent. There has been sufficient rain, a fair amount of sunshine, and frostless weather since February. The result is that the bulbs are flowering about two weeks earlier than usual. The only present danger is a cold snap with killing frosts.

Consular invoices show the following amounts of bulbs shipped to the United States during the past two years through the following places, the Rotterdam shipments including flower roots:

Cities.	1910	1911
Amsterdam, Holland.....	\$107,139	\$57,525
Rotterdam, Holland.....	609,097	811,227
Ghent, Belgium.....	362,682	387,077

NEW SUPPLY OF CHICLE.

As stated in Daily Consular and Trade Reports for March 19, 1912, the United States derives practically all of its 6,500,000 pounds of chicle annually imported (for chewing gum) from Mexico and Central America. Evidently tropical South America would also afford a large supply, as the following report by Consul General W. Henry Robertson, of Callao, Peru, would indicate:

Only one business man in Lima appears to deal in chicle gum. He stated that he always had about 500 pounds, more or less, in stock. His selling price is 4.50 soles (\$2.189) per arroba (25 pounds), or 17 soles (\$8.27) per quintal of 100 pounds. His supply comes from the Department of Piura in northern Peru, where large quantities are said to be produced. He was unable to give exact figures as to the amount of production, but stated that he knew of shipments of 100-quintal lots having been made from Piura, and that he believes that the supply is still abundant.

The gum is used here and in the Department of Piura by makers of straw hats for giving a certain color and shine to the straw. It is also used as a varnish of an attractive yellow cream color for renewing so-called Panama hats. [The addresses of firms in Peru who might aid in procuring chicle may be had from the Bureau of Manufactures.]

POWDERED MILK IN NEW ZEALAND.

[From Consul Henry D. Baker, Hobart, Tasmania.]

Mr. D. Cuddie, Director of Dairy Produce of the Agricultural Department of Wellington, New Zealand, recently stated that the making of milk powder has not become popular in New Zealand and that he does not regard the prospects of its doing so as very bright. The farmers seem to prefer to supply their milk to butter or cheese factories and receive the by-product for feeding their young stock. The only machine in use in New Zealand for drying milk is owned by a Wellington firm [name supplied upon application to the Bureau of Manufactures], who is also understood to hold the Australian rights for this machine. The dried milk produced has a very favorable reputation in Australia and New Zealand, especially as a food for babies, and it is apparently meeting with a good sale in England. Mr. Cuddie does not believe that there is any sale for machines for producing this product in New Zealand at present.

[A report from Consul Baker on the preserved-milk industry in New Zealand appeared in Daily Consular and Trade Reports for Sept. 27, 1911.]

Telephone Franchise in Ottawa.

Consul General John G. Foster advises that the city of Ottawa, Canada, has given to the Bell Telephone Co. a 5-year exclusive franchise, the company to pay \$12,000 annually (against \$5,000 formerly) and supply the city with 20 phones free. The service rates are to remain the same—\$45 for business phones and \$25 for residence phones. It is stated that by July 1 there will be about 8,000 phones in the exchange.

LEVANTINE BUSINESS NOTES.

[From the Near East.]

New Branches of Banks.

It is learned that the Ottoman Bank contemplates opening several new branch offices in various parts of Turkey, and it is likely that at least one or two of these banks will be opened in the near future.

Harbor for Damietta.

Admiral Robinson, Egyptian Director of Ports and Lighthouses, has left for Damietta to study the proposed construction of a harbor. The expense entailed by the construction of a small port—which, by the way, will serve no useful purpose—is estimated at \$1,000,000. It seems improbable that trade will be diverted from Alexandria, which possesses the finest harbor in the Mediterranean.

Carbonic-acid Gas Factory.

A huge carbonic-acid gas factory has been erected at Mex, Egypt, by Mr. Feifer. The factory, provided with every modern appliance, is to supply all the carbonic-acid gas required by Egypt, Turkey, and the Red Sea.

Irrigation in the Lebanon.

The investigation of the proposed irrigation enterprise in the Lebanon district of Syria having been completed by the National Bank of Turkey, arrangements have been made with Sir John Jackson (Ltd.), of London, to construct the works at an initial cost of \$250,000. The district is the populous Keerawan region, where it is intended to divert the waters of the Nahr-el-Selim, a considerable mountain stream which rises below Mount Sannin, and disappears underground in a "sink" in the limestone at Tahun-er-Reifun, into two small canals which will supply water for irrigation and other purposes to some 20 villages on the slopes from Reifun to the port of Junieh, about 18 miles north of Beirut. By arrangement with the Turkish Government the charge for the water will be \$25 to \$60, which will entitle the purchaser to 1 cubic meter of water per diem in perpetuo.

Building in Servia.

Proposals for allocating the following sums for the purposes indicated have been discussed in the present session of the Skupstchina: \$155,000 for university requirements, including the erection of a building for the technical section; \$75,000 for the building of a national library; a subsidy of \$38,000 for the erection of a building for the Academy of Science. The following further grants have also been proposed: \$45,000 for the erection of a gymnasium, and \$140,000 for other school requirements. From the sanitary funds are allocated: \$300,000 for a lunatic asylum, \$240,000 for the completion of the public hospital in Belgrade; \$500,000 for the erection of a hospital in the interior of the country, and \$130,000 for improvements at three Servian spas.

Machinery, iron, cement, and other building materials will have to be imported for the construction of these works, and British engineers, contractors, and building-material manufacturers and merchants will find Servia a very desirable field for good, sound business and the people very friendly toward the English.

BLOWING STUMPS WITH DYNAMITE.

[Résumé of Bulletin No. 154, issued by the Kentucky State Agricultural Experiment Station.]

Directions for blowing stumps with dynamite are followed by statements of the results of tests of the efficiency and economy of this method. Fifty per cent dynamite was used in most of the work, but 40 per cent proved satisfactory when used on some of the dead stumps.

Over 100 stumps having an average diameter of 16 inches were blown at London, Ky. The average number of sticks of dynamite used was 2.6, the average time required per stump 30 minutes, the average cost of material 25.7 cents, and the average total cost per stump 33 cents. Nearly all the stumps were dead oak. At the experiment station farm at Lexington nine green stumps averaging 22 inches in diameter were blown at an average cost of \$1.56 per stump, 10½ sticks of dynamite per stump being used. Of these stumps three black oak averaged 45 inches in diameter and were blown at a total cost of \$3.52 per stump, the average number of sticks of dynamite used being 23½.

The amount of dynamite required to blow stumps of the same kind in the same soil does not vary directly with the diameter, but more nearly with the square of the diameter, or, in other words, with the area of a cross section of a stump.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 599. Navy Department supplies.**—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until May 14, 1912, for the following supplies. Firms interested therein should make application to the Bureau of Supplies and Accounts, giving the schedule numbers desired: Schedule 4500, candles, Portland cement, prime geese feathers, fire hand grenades, airport lenses, lead pipe, cotton twine, flax twine, double face velour, spun-cotton lamp wick, air hose, rubber hose, fire upper deck hose, aluminum in cakes; schedule 4495, oil filters, bibb brass cocks, brass cocks and faucets, faucets, brass cans, spouts and feeders, chime single bell whistles, flexible copper hose, rubber hose, steam hose; schedule 4498, water filters and coolers, grates and saddles for ranges, steam jacketed copper kettles, bake ovens, fire panels, copper coffee urns; schedule 4497, safety matches, glass pepper and salt shakers; schedule 4492, bituminous coal, semi-bituminous coal; schedule 4499, air centrifugal set compressor, pipe expanding and flanging machine, 6-roll double cylinder planer and matcher machine; schedule 4493, nickel steel recoil cylinder, torpedo bronze; schedule 4501, worm-gear chain blocks, steel bolts and nuts, empty paint cans, boat chains, wire brass cloth, emery cloth, dies for machine screws, files, brass grommets, copper hammers, scaling hammers, bronze hasps, bronze hinges, chain spur-gear hoists, toilet-paper holders, nickel-plated brass lamps, hand deck brass lanterns, globe hand lanterns, garnet paper, hull steel rivets, wood brass screws, iron machine screws, tinned wood steel screws, galvanized-iron anchor shackles, wrought-iron screw chain and anchor shankles, bench vices, pipe wrenches; schedule 4503, white ash, white cedar, white-cedar boat boards, mahogany, white oak, white-oak timber and planks, white-oak timber, New England country pine, North Carolina pine, Oregon pine, sugar pine, white pine, panel white pine, yellow pine, yellow-pine decking, white joist spruce, merchantable spruce, West Virginia merchantable spruce, spruce poles for spars, spruce staging; schedule 4496, regulas of antimony, bronze manganese ingots, monel metal, half-and-half solder, round strip solder; schedule 4502, alcohol, crystals oxalic acid, iron or steel cement compound, paint drier, glycerin, graphite lubricating grease, dry lamp-black, dry yellow ochre, raw linseed oil, petrolatum, sal ammoniac, black asphaltum varnish, white zinc in oil; schedule 4504, altos (E flat), baritones (B flat), bugles; concert (C) flutes, (E flat) terz flutes, (B and E flat) clarinets, (B flat) cornets, cymbals, bass and tenor drums, (E flat) piccolos, (tenor) trombones, first and second violins with bows. Bids will be received until May 21 for cut-off saw machine, schedule 4505. Tenders are invited until May 28 for ammunition lighter. Proposals will be received until June 25 for lightweight gray prison cloth and gray prison flannel, schedule 4507.
- No. 600. Electric elevators.**—The Bureau of Yards and Docks, Navy Department, Washington, D. C., will receive proposals until May 11, 1912, for installing three electric elevators; one in the naval hospital, Chelsea, Mass.; one in the naval hospital, Newport, R. I.; and one in the naval hospital, Portsmouth, N. H. Plans and specifications can be obtained upon application to the Bureau of Yards and Docks.
- No. 601. Condemned Navy material.**—There will be sold at the navy yard, Mare Island, Cal., material belonging to the Navy, condemned as unfit for use therein, consisting of boats, cutters, pumps, boilers, engines, clothing, musical instruments, packing, furniture, twine, nautical instruments, books, flags, medical stores, machine tools, hand tools, dishes, ordnance stores, ingot brass, scrap metal, searchlights, hand and leg irons, generating sets, diving apparatus, etc. Schedules containing form of proposals and terms of sale can be obtained upon application to the General Storekeeper, Navy Yard, Mare Island, Cal.
- No. 602. Dredging.**—Sealed proposals for dredging in Wicomico River, Md., will be received at the United States Engineer Office, Room 309, Customhouse, Baltimore, Md., until May 15, 1912. Information on application to W. C. Langfitt, Lieutenant Colonel, Engineers.
- No. 603. Panama Canal supplies.**—Sealed proposals, in triplicate, will be received at the office of the General Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., until May 1, for cast-iron car wheels, covering the annual estimate for the period ending June 30, 1913. (Circular No. 703.)

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

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LINSEED AND LINSEED OIL.

[From Consul General Robert P. Skinner, Hamburg, Germany.]

As little or no linseed is grown in Germany very large quantities are imported, the principal center of this business being Hamburg and the chief sources of supply Russia and Argentina.

North Russian linseed is used more particularly for the production of a greenish oil used chiefly in the manufacture of linoleum and oilcloths, an industry of large proportions in this country. The details of the German trade appear in the following figures showing the total imports and exports of linseed and linseed oil, in metric tons of 2,204.6 pounds:

Imports and exports.	1908	1909	1910	1911
LINSEED.				
Total imports.....	468,421.0	438,866.0	320,522.0	276,102.0
From Belgium.....			357.0	486.0
From Netherlands.....	1,318.0	1,654.0	2,701.0	1,823.0
From Austria-Hungary.....	1,440.0	1,729.0	1,194.0	718.0
From Russia.....	47,680.0	38,405.0	53,381.0	50,256.0
From Morocco.....	282.0	625.0	2,098.0	841.0
From British India.....	7,677.0	15,192.0	44,396.0	75,036.0
From Japan.....		1,390.0		
From Dutch Indies.....				821.0
From Argentina.....	392,861.0	370,847.0	215,073.0	144,116.0
From Uruguay.....		4,825.0		
From United States.....	15,673.0	1,432.0	308.0	886.0
Total exports.....	8,409.0	6,828.0	11,559.0	6,343.0
LINSEED OIL.				
Total imports.....	1,744.6	2,058.9	1,906.9	2,864.8
From Great Britain.....	118.1	191.0	92.9	189.8
From Netherlands.....	1,540.0	1,719.8	1,633.4	2,419.9
Total exports.....	869.6	622.2	4,512.1	3,222.8
To Great Britain.....		88.5	3,400.0	2,041.2
To Austria-Hungary.....	383.9	204.9	501.0	266.5
To Brazil.....			33.2	178.7
To United States.....		.8	339.8	339.2

As the seed is on the German free list and the oil is dutiable at the rate (per 220.4 pounds) of 95.2 cents when in casks and \$4.76 when in receptacles other than casks, the importations of the oil itself are inconsiderable and the purchases from the United States not sufficiently large to call for special mention in statistical tables.

The price for River Plate linseed on February 19, 1912, for January-February shipments was \$75.45 per metric ton. The price of oil was \$18.80; for oil from February-April, \$18.30, and from March-August, \$16.65 per 220.4 pounds.

From January 1 to November 28, 1911, the world's shipments of linseed to Europe amounted to 4,813,000 quarters (41,254,286 bushels) against 5,051,000 quarters (43,294,286 bushels) in 1910 during the same period.

[From Consul General John H. Snodgrass, Moscow, Russia.]

Russian Exports and Prices.

No definite, accurate figures concerning Russia's linseed crop in 1911 are available as yet. However, an idea of the Empire's production of this seed may be gained from the exports, which in 1910 amounted to 157,194 tons, value \$9,928,685, and in the first 11 months of 1911 to 126,180 tons, value \$7,789,890. It is stated that the crop in 1911 was larger than that of the previous year, and at present (Feb. 26) the seed is selling for \$1.25 to \$1.50 per pood of 36.112 pounds.

AMERICAN LINSEED CROP AND TRADE.

The importance of linseed as an agricultural product of the United States can be seen from the following table, made up from statistics supplied by the Department of Agriculture and by the Bureau of the Census, Department of Commerce and Labor, giving data by States for 1911 and the totals for the five preceding years:

States.	Acreage.	Production, in bushels.	Farm value, Dec. 1.	Average price per bushel, Dec. 1.	Average yield per acre, in bushels.
Colorado.....	3,000	21,000	\$38,000	\$1.80	7.0
Iowa.....	10,000	128,000	237,000	1.85	8.0
Kansas.....	75,000	225,000	428,000	1.90	3.0
Minnesota.....	400,000	3,200,000	5,824,000	1.82	8.0
Missouri.....	18,000	64,000	103,000	1.90	3.0
Montana.....	425,000	3,272,000	5,890,000	1.80	7.7
Nebraska.....	2,000	10,000	18,000	1.85	5.0
North Dakota.....	1,200,000	9,120,000	16,781,000	1.84	7.6
Oklahoma.....	1,000	3,000	5,000	1.80	3.0
South Dakota.....	607,000	3,217,000	5,726,000	1.78	5.3
Wisconsin.....	10,000	120,000	222,000	1.85	12.0
Total, 1911.....	2,757,000	19,370,000	35,272,000	1.82	7.0
1906.....	2,506,000	25,576,000	25,899,000	1.01	10.2
1907.....	2,804,000	25,851,000	24,713,000	.96	9.0
1908.....	2,697,000	25,805,000	30,577,000	1.18	9.6
1909.....	2,083,142	19,512,764	29,795,000	1.53	9.4
1910.....	2,467,000	12,718,000	29,472,000	2.32	5.2

As an item of export linseed almost disappeared from the foreign-trade records of the United States in the fiscal year 1911, amounting to only 976 bushels, valued at \$2,520, in sharp contrast to the 6,336,-

310 bushels shipped five years ago. The exports, by principal countries of destination, for the last half decade were as follows:

Countries.	1907	1908	1909	1910	1911
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
Belgium.....	228,713	272,292	251,603	8,179	
Denmark.....	124,731	42,127			
France.....	147,110	148,797			
Germany.....	1,259,388	797,312		23,072	
Greece.....		40			
Italy.....		26,079			
Netherlands.....	1,215,540	1,096,712	138,778	27,598	
United Kingdom.....	3,358,154	1,858,430	491,553	3,470	
Bermuds.....				21	37
British Honduras.....		6	7	3	
Canada.....	2,560	35,425	558	344	656
Costa Rica.....					2
Honduras.....			1	1	
Panama.....		22	7	78	7
Mexico.....	10	1	4	25	1
Cuba.....		60	375	362	273
Santo Domingo.....				19	
Colombia.....		10	8	21	
Venezuela.....	104		5		
Total quantity.....	6,336,310	4,277,313	882,999	65,193	976
Total value.....	\$7,990,383	\$5,721,337	\$1,092,539	\$118,329	\$2,520

During the same five-year period imports of linseed into the United States rose in corresponding measure, amounting in the fiscal year 1911 to 116 times the quantity imported in 1907. By principal countries of origin the imports of linseed were as follows for the years 1907-1911:

Countries.	1907	1908	1909	1910	1911
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
Belgium.....				179,447	199,280
France.....				4	1
Germany.....		8	13		
Netherlands.....	1,067		1	374	584
United Kingdom.....	79,676	14,024	34,470	9,552	693,160
Canada.....	9,603	7,418	479,189	1,410,398	2,251,083
Mexico.....				2	
Argentina.....	8	28	76,000	3,209,087	5,021,137
British India.....		35,941	3,995	193,628	2,333,863
Japan.....				4	119
French Africa.....	2				
Total quantity.....	90,356	57,419	593,668	5,002,496	10,499,227
Total value.....	\$124,494	\$71,625	\$831,871	\$8,548,837	\$21,379,180

Exports of American linseed oil were valued in the fiscal year 1911 at \$164,879, compared with \$155,858 in 1910, \$140,876 in 1909, \$172,083 in 1908, and \$203,712 in 1907. The imports are not separately stated in available data.

WORLD'S LINSEED PRODUCTION.

Under date of February 9, 1912, Dornbusch's Floating Cargoes List reviews the world's 1911 production of linseed as follows:

The world's production of linseed in 1911 was with one exception (1907) the largest for many years and exceeded the preceding season by about 600,000 tons. India not only yielded the highest since 1904, but gave a crop far in excess of the past 15 years' average. Argentina, despite a record acreage, unfortunately again proved more or less a failure, and we have yet to learn whether the official estimate of 638,000 tons recently published can even be relied upon. One thing seems certain, the quality is very disappointing and likely to be worse than in 1910-11. Russia is com-

puted to have yielded better than during the year previous, which receives confirmation from the large shipments of the past few weeks. North America is officially reckoned to have yielded a crop 170,000 tons better than in 1910, but concerning same there is much doubt, and commercial authorities are of the opinion that the excess is barely 70,000 tons. Canada is officially said to have trebled the previous record, but, a good proportion being under snow, the actual quantity available has yet to be defined. Of the Indian crop, the whole quantity of the seed known as "pure" has been accounted for, and about 83 per cent of the "mixed."

Argentina last season shipped about the average proportion of its crop, with America absorbing 19 per cent of the total export. North American shipments to Europe were a blank, which is likely to be repeated this year, so far as concerns the present crop. The Russian and the Danubian contributions again proved useful, although rather under the previous year's quota. Of the world's total shipments, the United Kingdom took a larger percentage than in 1910, but still fell short of preceding seasons, and compared with 1900 the United Kingdom absorbed but half the proportion of shipments.

A year ago at this time we thought that \$14.60 for Calcutta would produce a good consumptive trade, whereas \$15.60 proved the lowest spot price during all 1911, with spot London linseed oil not touching under \$163 per ton. From present indications it may be predicted that, although the record high prices of 1911 are not likely to be repeated, values will remain more or less at a lofty level, and in the neighborhood of \$13.40. Calcutta linseed should have considerable attraction for crushers.

The world's production of linseed for the past 10 years, compiled from official returns, was as follows:

Years.	India.	Argentina.	North America.	Canada.	Russia.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1902.....	342,624	763,976	732,122	.....	542,224	2,380,946
1903.....	481,567	937,601	682,513	.....	461,314	2,562,995
1904.....	571,832	740,000	585,613	.....	471,846	2,369,291
1905.....	347,400	591,912	711,944	.....	421,000	2,072,256
1906.....	353,400	825,764	626,500	.....	540,500	2,346,164
1907.....	425,200	1,100,710	646,275	40,670	550,590	2,763,445
1908.....	163,200	1,048,852	645,125	35,133	556,339	2,448,649
1909.....	288,800	716,515	467,825	55,325	558,360	2,106,825
1910.....	427,600	585,000	317,950	95,050	1 650,000	2,065,600
1911.....	557,600	638,000	484,250	323,000	1 670,000	2,673,050

¹ Estimated.

USE OF MILK BOTTLES IN GERMANY.

[From Consul General A. M. Thackara, Berlin.]

American firms are seeking to introduce in Germany various devices for the improved handling of milk. One of the large glass-bottle manufacturers in Berlin has informed this office that machine-made milk bottles are used in this city, but most of the bottles are handmade.

In Berlin the sale of milk in bottles at retail constitutes only a part of the total quantity consumed. Many of the German families buy their supplies from the milk stores or perambulatory milk wagons in bulk. The quantity desired is measured out and poured into pitchers, cans, or other receptacles belonging to the purchaser.

Specially pure milk for children and invalids, for which an extra price is charged, is always delivered in glass bottles carefully sealed by paper capsules or by other means. When bottles are used for transporting milk they are provided with paper capsules. Patent wire-rubber stoppers are also employed.

[A list of Berlin milk dealers—one of whom handles 35,000 gallons daily—and of German manufacturers of milk bottles may be had from the Bureau of Manufactures.]

COTTON-GROWING EFFORTS.**ASIATIC RUSSIA.**

[From Consul General John H. Snodgrass, Moscow.]

An irrigation company made up of wealthy Moscow merchants, formed three years ago with a capital of \$15,000,000, is considering the feasibility of irrigating a tract of 672,500 acres in Ferghana for cotton growing. A concession of 1,345,000 acres has been obtained from the Government, and it is understood that the Government will guarantee the undertaking with a loan at 4½ per cent.

Cotton is Russia's principal import, amounting to \$50,000,000 a year. While the measures taken by the Government to encourage cotton growing have already largely increased its cultivation, the annual output now being 198,000 short tons, valued at \$77,250,000, the demand for cotton is so great that an amount nearly as large is brought from other countries, chiefly from the United States. Wishing to create a supply of Russian cotton equal to the home demand, the Russian Department of Agriculture has undertaken a number of projects with the view to increasing the area of irrigated lands in the cotton-producing portion of the Empire and the development of cotton culture.

Irrigation Projects in Eastern Russia.

About \$5,000,000 has been requisitioned for irrigating the north-east part of the Golodnaya steppe, in Turkestan, and the central part of the Muganskaya steppe, in Transcaucasia. A canal irrigating 32,280 acres was opened in the Muganskaya steppe in April, 1911, and a second canal irrigating 21,520 acres is nearly completed. In four years all the irrigation works in these two regions will be finished, giving not less than 511,100 acres suitable for cultivation.

Investigations are to be made in eastern Transcaucasia, in the central part of the Golodnaya steppe, and in the lower course of the Amou-Daria River, within the boundaries of Bokhara. It is proposed to commence explorations in the Transcaucasian and Turkestan districts to ascertain what facilities for irrigation exist in those parts of the Empire. Another project calls for the irrigation of the Milsкая steppe, in Transcaucasia, which has an area of 416,950 acres.

A law relating to the water administration in Turkestan and a compendium of rules repermitting private irrigation enterprises in that region are being prepared, to be passed upon by the Council of Ministers during the coming winter. The question of getting immigrants for the newly irrigated lands in Mugan and on the Golodnaya steppe will come up before the Government Duma.

Engineers are to be sent to the United States, India, and Egypt to learn the latest improvements in irrigation methods, and five cotton experiment stations have been established in Transcaucasia and Turkestan. There are also some cotton-exhibiting plantations, the number of which will soon be increased to 12, and more Government specialists are being designated to assist cotton growers.

To avoid delay in completing works already begun and in investigations, the year's appropriations have been increased by \$221,450, which will be used to better the conditions of cotton growing.

Loans for Cotton Growers—Experiments with Other Fibers.

The Agricultural Department deems the organization of a cheap and generally accessible system of credit in Turkestan and Trans-

caucasia indispensable, and the Government proposes to establish a special small-credit organization for cotton growers with a capital of about \$7,000,000, or to permit credits to be given by the already existing savings banks and county cash offices.

In endeavoring to diminish the requirements of raw cotton, the Russian Department of Agriculture has given attention to the evolution of the flax and hemp industries, in the cheapening of spinning methods, and the utilization of flax waste as a new spinning material in place of cotton. These questions are not regarded as decided, and the department is considering the establishment of two experiment stations in Moscow, at a cost of \$120,000, requiring \$30,000 annually for their maintenance.

Conditions in Turkestan—Government Earlier Irrigation Work.

Little irrigation work has been done in Turkestan, although the conditions there are very favorable and repeated attempts have been made. There are two large rivers in that region, the Syr-Daria and the Amou-Daria, besides a number of small streams. About three-fourths of the country is made up of plains lying some 980 feet above sea level. The lowest portions of the plains are north and southeast of the Aral Sea, where the sandy deserts of the trans-Caspian district approach the Caspian Sea, which lies 84 feet below sea level. The soils of Turkestan are generally fertile, but always require irrigation. The country contains 453,000,000 acres, a little less than all western Europe, of which only about 8,000,000 acres are irrigated and cultivated. The amount of water that can be had for irrigation is reasonably estimated as sufficient to irrigate a large portion of the country, and in any case to grow cotton enough to supply the Russian demand. Lack of means makes it impossible for the landowner of Turkestan to build his own irrigation system.

The first productive attempts at irrigation were made at the end of the last century. The canal of Emperor Nicholas I was completed in 1898 and runs through part of the Golodnaya steppe, and a second canal was built about the same time. These canals irrigate only 51,660 acres. The irrigation of 166,050 acres in the northeast part of the Golodnaya steppe was undertaken in 1900. The building of the canal for this project was found difficult to continue, and only recently the Government allowed \$2,500,000 for its completion. This sum, as well as the amounts formerly appropriated by the Government, are insufficient to irrigate the area necessary to produce an adequate supply of cotton for the country. To double the production of cotton in Turkestan would require a Government outlay of \$200,000,000.

Regulations for Private Irrigation Enterprises.

In view of the increasing economic demands, and the enormous amount of arid land in Turkestan, other means must be found to hasten irrigation, which the Government believes is the only way to prepare for colonization and the widening of the cotton-producing area. Hence a project is under consideration to permit the irrigation of Government lands through private enterprise. The chief features of this project are as follows: (1) Land can be leased for not to exceed 99 years, and in some cases the lessee may purchase outright; (2) lots of land not exceeding 13,450 acres may be leased for

not more than 36 years by applying to the Chief Bureau of the Agricultural Department; for larger tracts or longer leases, application must be made to the Council of Ministers; (3) preliminary investigation of the land desired for lease can be made only upon presentation of the plan of the investigation, and with the obligation of completing them at a certain time.

This project was framed by the Chief Bureau of Agriculture and is now under consideration by the committee on cotton.

ASIATIC TURKEY.

[From Consul Edward I. Nathan, Mersina.]

The latest estimate of the cotton crop of the Province of Adana, Turkey, in 1911, is 85,000 bales, of which about 25,000 bales were retained by the spinning mills of Adana and Tarsus. The exports of cotton from Mersina in 1911 were valued at \$1,875,870, divided principally as follows: Austria, \$1,252,002; France, \$83,722; Germany, \$115,324; Italy, \$180,042; and Spain, \$209,238.

The cottonseed crop amounted to 30,000 tons, of which 15,000 tons were used locally for cattle feeding and 6,000 tons for the Mersina oil mill. The remainder was exported to England. Cottonseed cake to the value of \$28,466, the first ever made in Mersina, was exported to England.

The local cotton is principally short fiber, though a small quantity of long-fiber (American) cotton is produced. The long summer drought and the lack of irrigation here are unfavorable to the cultivation of American cotton, and the difficulty of picking that cotton is another drawback, as labor is scarce here. The local cotton is picked with the stalk and hull and is separated from the hull later. This is mostly done by hand, but lately some American machines have been imported for this purpose.

Adana cotton seed contains only 16 per cent of oil, of which 11½ per cent is extracted.

ERITREA.

[From Consul General James A. Smith, Genoa, Italy.]

The recent report of the Milan company which holds a concession for cotton growing in Eritrea places the 1911 cotton crop produced in the colony at 8,440 quintals (quintal = 220.4 pounds), as compared with 5,472 quintals in 1910. The company also produced about 8,000 pounds of cottonseed oil, 72,000 pounds of grain, and 80,000 pounds of cotton seed. With other subsidiary products, the company's balance sheet shows a turnover of about \$364,000, against \$142,000 for the preceding year, and a net profit of about \$28,000.

This favorable showing has encouraged the further extension of the company's cotton-growing area at Agordat and Carcabat and the cultivation of a new region bordering on the Red Sea near Sahel. The proximity of the latter place to transportation facilities gives it a great economic advantage. During 1911 the company spent about \$27,000 in improving and extending its hydraulic system for irrigation. A new flour mill was erected at Massaua and an electric-lighting plant at Agordat. The problem of supplying drinking water to the 5,000 workmen employed during the cotton season has been solved

by the use of wells and windmills, the water being carried to the fields through iron pipes. Water was formerly brought from a distance by camels. The capital of the company has been increased to \$210,000.

BRITISH WEST AFRICA.

[From Consul William J. Yerby, Sierra Leone.]

Considerable progress has been made by the Government during the past year in the construction of roads in the cotton-growing districts of Southern Nigeria, and the staff of the cotton-growing association is now better able to inspect the farms where the bulk of the cotton is produced. According to the latest reports from Lagos, the crop will be late. It is claimed that a much larger area was planted in 1911 than in 1910. It is not expected that the crop will escape suffering to some extent from the cold winds from the desert, but, allowing for this, the crop is expected to reach 7,000 bales of 400 pounds each. The purchases of cotton in Lagos during January, 1912, were 175 bales.

Prospects in Northern Nigeria.

The following is taken from a recent dispatch of the governor of Northern Nigeria:

Strenuous efforts are being made to encourage the natives to grow cotton on a large scale. Experimental plots have been established in various centers and the relative merits of three different varieties of cotton have been tested. An excessive period of drought has militated not only against the success of these experiments but also against that of the cotton crop as a whole; therefore the crops almost everywhere have been below the average. Buying depots are now being opened by the British Cotton Growing Association in the chief cotton-growing centers, and a ginnery on a large scale is in course of construction at Zaria. As soon as the natives begin to realize that cotton is a crop which is not affected by the local supply and demand, and for which there is always a ready sale to an unlimited extent, they will embark largely in its cultivation.

Although the governor does not share the extremely roseate views that have been expressed in the past concerning the rapid development of an immense output of cotton from the Protectorate, he expresses himself as believing that under proper guidance and encouragement there will be a steady and continuous increase of production, and the industry will have a marked effect on the prosperity of the country.

The people have for centuries been accustomed to the growing of cotton and have little to learn as to methods of cultivation. The problem lies in the improvement of the local varieties of cotton, and in the discovery of means by which the productiveness of the plants can be increased. Though the outlook in the Hausa States is distinctly hopeful, the prospects of cotton growing on a very large scale are much more promising in the fertile lands of the Provinces bordering on the Niger and Benue Rivers.

The San Francisco Exposition.

The Department of Commerce and Labor is advised by President Charles C. Moore, of the Panama-Pacific International Exposition, that the directors have fixed February 20, 1915, as the opening day. The mildness of California winters enables this world's fair at San Francisco to arrange for "its continuance from winter to winter, which will be of the utmost advantage to participating nations, States, and individuals."

NEW SHIPS AND SHIPPING.**SCANDINAVIAN-AMERICAN LINE.**

[From Consul General E. D. Winslow, Copenhagen, Denmark.]

The United Steamship Co. of Copenhagen, which operates the Scandinavian-American Line, shows a prosperous year for 1911. The company has 119 ships in commission and the total gross income was about \$7,190,000, net profits \$1,340,000, while \$500,000 was written off for depreciation, and about \$400,000 set aside for reserve fund. Salaries took \$61,000. Stockholders received 6 per cent against 5 per cent in 1910; shares are quoted at 113. The large amount placed in reserve fund is deemed necessary by the directors to meet the demand for new ships of greater tonnage capacity.

The company will this year do a certain amount of its own insuring. The company has been somewhat surprised at the decline in third-class passenger traffic to both North and South American ports, but freight rates having advanced and tonnage offered being so heavy, the decreased revenue from third-class passengers was not felt.

NEW BRITISH VESSEL FOR EASTERN TRADE.

[From Consul Hunter Sharp, Belfast, Ireland.]

The *Demodocus* was launched here on March 26 for the China Mutual Steam Navigation Co. (Ltd.), of Liverpool, for trade with the Far East. It is 460 feet in length, with a gross tonnage of 6,800. The cargo space is divided into six holds, which are unobstructed by pillars and therefore capable of receiving cargo consignments of large dimensions. The propelling machinery consists of a set of triple-expansion engines, supplied with steam from two multitubular boilers, with an auxiliary boiler for the deck machinery.

NEW ORLEANS AND PANAMA.

[From Consul General Alban G. Snyder, Panama City.]

The United Fruit Co. proposes to establish about November 1, 1912, a triweekly service between New Orleans and Colon to take care of the increased passenger and freight business which has recently developed on this route. Two of these ships will be in the direct service to Colon and the other in the coastwise service, making in all nine ships engaged in New Orleans-Colon trade.

EUROPE AND ARGENTINA.

[From Consul General R. M. Bartleman, Buenos Aires.]

The Shipping Gazette reports that the Banque Française and the Banque Transatlantique are founding a new steamship company to take over from the Société d'Études de Navigation the concession for the South American mail traffic. The company will have \$3,000,000 capital and issue \$5,000,000 in bonds. The intention is to build a steamer of 19 knots for service between Bordeaux, Lisbon, Rio de Janeiro, and the River Plate. Others interested are the Société de Transports Maritimes and the Compagnie Générale Transatlantique.

It is reported that the Johnson Line has decided to build two more 4,000-ton steamers for the increasing traffic between Sweden and

Argentina. Operations were commenced by this line in 1904 with two vessels and at the beginning of this year there were six boats. The additional ships will permit establishing a fortnightly service.

NEW JAPANESE CARGO BOAT.

[From Consul George N. West, Kobe.]

A new cargo boat for the Nippon Yusen Kaisha was launched at the Kawasaki dockyard on March 5. It has been named the *Shizuoka Maru* and is to be placed on the American service. The dimensions are: Gross tonnage, 6,200; breadth molded, 50 feet; length, 400 feet; depth molded, 30 feet. Speed, 15 knots.

NEW CUBAN GUNBOATS.

[From American Minister A. M. Beaupré, Habana.]

There were launched on April 1 two Cuban gunboats, *Habana* and *Pinar del Rio*, which were constructed at the Krajewski-Pesant shipyards in Regla, across the bay from Habana. Each vessel has a displacement of 80 tons and is to be provided with one 3.7-centimeter cannon, located forward.

SHIPPING FACILITIES OF BANGKOK.

[From Vice Consul General Carl C. Hansen, Bangkok, Siam.]

The shipping activities of Bangkok have more than doubled during the past 10 years. During the fiscal year 1910-11, 927 ships, with a tonnage of 865,607, were cleared inward, as compared with 454 ships, tonnage 380,477, for the year 1900.

The nationality of the shipping has also undergone a change, as may be seen in the following table, which gives the inward shipping of the port of Bangkok for the years 1899 and 1910:

Nationality.	1899		1910	
	Number.	Tonnage.	Number.	Tonnage.
United States.....	Nil.	Nil.	Nil.	Nil.
British.....	301	271,622	94	133,406
German.....	78	75,529	404	415,393
Norwegian.....	22	15,837	266	216,868
All other countries.....	61	35,330	58	44,338
Total.....	462	397,718	822	810,007

Present Shipping Facilities.

European line.—The only Bangkok-European direct line of steamship service at present is maintained by the East Asiatic Co. (Ltd.), which provides monthly sailings of first-class cargo and passenger steamers between Bangkok and Copenhagen, these vessels calling also at London and other European ports. Three steamers of 2,100 to 2,250 registered tons net each are now in this run, the voyage taking from 55 to 60 days. Three new motor vessels of about 3,200 registered tons net each will be put on the route in a few months, and after May there will be sailings from Bangkok to Copenhagen every three weeks.

Java-Siam line.—The Royal Packet Steam Navigation Co. dispatches a first-class cargo and passenger steamer every four weeks from Bangkok to Batavia, Cheribon, Samarang, and Soerabaya direct.

Saigon-Bangkok line.—Fortnightly service between Bangkok and Saigon is provided by the Messageries Fluviales de Cochinchine. This service connects with steamers for Cochin China, Cambodia, and Laos, and with the mail steamers of the Messageries Maritimes.

Bangkok-Singapore service.—The Norddeutscher Lloyd keeps up a regular weekly service which connects with the Imperial German mail line at Singapore. Besides the above steamers there are a number of cargo vessels which also carry passengers.

Coastwise steamship service.—The Siam Steam Navigation Co. (Ltd.) has a fleet of eight steamers for the trade on the west coast of the Gulf of Siam. These carry passengers and cargo to and from the more important ports of the Malay Peninsula and Singapore. The Straits Steamship Co. (Ltd.) has recently started in competition with the above company for the west coast run. The east coast service is provided for by steamers of the East Asiatic Co. (Ltd.), which make weekly trips to Chantaboon and Krat.

Bangkok-Hongkong run.—The North German Lloyd has departures of steamers from Bangkok to Hongkong about every third day. The Chino-Siam Steam Navigation Co. runs chartered Norwegian steamers in competition with the North German Lloyd. This competition has reduced the freight from Bangkok to Hongkong to 23 cents Mexican per picul (133½ pounds), the former rates being 25 to 30 cents (\$1 Mexican in Far East now worth about \$0.46). The run from Bangkok to Hongkong takes 7 to 8 days. The Bangkok-Singapore rate has also been reduced to 17½ cents Mexican, formerly 22½ to 25 cents per picul. The voyage from Bangkok to Singapore takes 3 to 5 days.

The bulk of the cargoes from Bangkok consists of rice and teak wood, the shipments of rice for last fiscal year amounting to 1,172,556 tons and of teak wood to 89,165 tons. Up to March 31, 1911, no American merchant vessel has touched at Bangkok since 1893. Freight from Bangkok to the United States and vice versa is as a rule transshipped at Hongkong and Singapore.

SOUTH MANCHURIA RAILWAY RETURNS.

[From Consul Albert W. Pontius, Dalny, Manchuria.]

The tenth semiannual report of the South Manchuria Railway Co., covering April–September, 1911, shows profits of \$127,432. The total assets are now \$129,256,035, the cost value of the railway and enterprises being \$52,012,335; expenditures on harbor, buildings, land, and mines now reach \$14,630,924; \$2,609,642 has been spent on constructing and laying out shops, while \$2,162,034 represents the outlay of the electric-light department. The gas and electric systems are returning steady profits. The stringent measures adopted for plague prevention cost the company an extra \$70,880. The disappearance of the epidemic early in the term occasioned a healthy revival in the shipment of produce over the railway's main line, receipts being \$218,236 greater than in the same period of 1910.

[The company's complete report, in English, showing construction work and detailed balance sheet will be loaned on application to the Bureau of Manufactures, Washington, D. C.]

HARBOR FACILITIES AT CURAÇAO.

[From Consul General S. Listoe, Rotterdam, Netherlands; see also Daily Consular and Trade Reports for Apr. 3, 1912.]

It is generally known that the Dutch colonies in the West Indies have for several years undergone difficult economical conditions. In view of this, the Dutch Government in the spring of 1911 appointed a commission to investigate and endeavor to find a means of bettering conditions in the colonies, so as to place them on a more profitable financial basis. After this commission had interviewed former colonial officials and residents, it sent three representatives to the colonies to make a personal investigation.

The committee, consisting of Dr. Bos, chairman, Dr. S. de Monchy, secretary, and Mr. van Vollenhoven, former manager of the large firm *Deli Mij*, in the East Indies, made a careful investigation and published its findings in a complete and lucid report; in consequence the States General voted \$48,800 for improving and widening St. Anna Bay Canal at Curaçao. Of this amount \$20,000 is proposed for removing rocks, the balance to be used for purchasing a sand-sucking machine which, with the dredging machine already on hand, will insure the navigability of the canal.

St. Anna Bay, which forms the entrance to the 33-foot deep harbor *Schattegat*, near *Willemstad*, but which is in reality used largely as a harbor, is 1,200 by 50 yards and 30 feet deep. It is proposed to widen this canal to 70 yards and deepen it to 36 feet. The Colonial Department had wished to make its breadth 90 yards, but finally decided that this could readily be done later, should occasion arise, and with no more expense than if done at present.

The Government has for several months had an application from a syndicate for a concession to use *Schattegat* Harbor, with a pledge of \$2,800,000 for improvements, of which the Government should pay \$600,000 in installments covering 10 years. The syndicate stipulates that a 36-foot depth be maintained in the canal, and that the Government deepen it should this later appear necessary, and that no vessels should be allowed to use the canal as a harbor.

The Government some time ago requested the *Commissie van Handelspolitiek* to report its view of the commercial and maritime prospects for Dutch enterprise as a result of opening the Panama Canal. Until this report appears no final action will be taken on the syndicate's application. It is not probable, however, that the Government will favor this concession, the \$600,000 appropriation for which must receive the approval of the States General.

The colonies are strongly opposed to the concession, particularly the local chamber of commerce, the Colonial Council, and many private business men directly affected, all of whom maintain that the colonies both can and desire to look after their mercantile and maritime interests themselves.

The Government must also consider that, in case the concession is granted, all firms and individuals having interests along St. Anna Bay Canal, such as wharves, docks, warehouses, etc., must be reimbursed for their losses. On the other hand, should the Government refuse the concession, it must first be furnished ample assurance and guaranty that the colonies are in position to undertake the responsibility of improving the harbor themselves and carrying out the proposed plans.

ONTARIO NOTES.

[From Consul Fred C. Slater, Sarnia, Canada.]

Bridge Renewals—Spraying Fruit Trees.

Serious damage has been done in this section by floods, caused by melting of heavy snows. Many bridges along the various streams have been destroyed, replacing which will cost many thousand dollars.

In this southernmost section of Ontario interest is growing yearly in the fruit industry, and with it an ever-increasing realization of the advantages of scientific spraying and pruning of trees. It is said "where one farmer treated his orchard against disease and pests a few years ago there were at least 10 last year, and this spring will find the majority engaged in scientific spraying. Judicious pruning has also been a contributing factor." This system of orcharding has brought the fruit, particularly the apple of this locality, to a high standard and reputation in the market.

New Industries—Agricultural Experimentation.

Many towns and cities in this locality are bidding for industries, and to that end offer bonuses and other concessions to most factories that show stability. On April 8 Chatham voted 1,500 to 80 in favor of granting a bonus to an American company for locating a factory to make gas and gasoline engines and supplies. The company agrees to begin with at least 50 employees, with not less than \$30,000 in wages the first year and not less than \$60,000 thereafter.

The Ontario Government has provided an agricultural expert to have charge of the farms in connection with its nine institutions, including three hospitals for the insane, and cultivating in all something over 4,000 acres. At some of the places plots will be reserved for experimental purposes. It is hoped not only to raise products for the upkeep of these institutions but to enrich the cause of scientific farming as well.

SOUTH AFRICAN NOTES.

[From British and South African Export Gazette.]

Leather goods of all kinds to the value of \$7,650,000 were imported into the Union of South Africa in 1911, against \$7,600,000 in 1910.

The coffee industry in British East Africa is in a very flourishing condition, the returns in many cases being as high as \$100 per acre.

Coal mining.—The first fully equipped anthracite mine in the Transvaal was recently opened by the Mary Anthracite Colliery Co. near Ermelo.

Basutoland.—The advance in the trade requirements of Basutoland is indicated by the fact that the population now numbers about 402,500, an increase of over 54,700 since 1904.

Window glass to the value of \$1,090,000 and plate glass amounting to \$1,235,000 was imported into British South Africa last year. The supply is practically a British monopoly.

Farm machinery.—Reports from Hanover, Cape Province, state that irrigation is working wonders in that part of the Karoo, and steam plows and other agricultural machinery are in increasing demand.

Electrical supplies.—The Kalk Bay municipality is to undertake the supply of electricity to Wynberg, the latter furnishing \$75,000 to \$100,000 toward the cost. Material and fittings will be required for making the necessary plant extensions.

Rag shipments from Japan to the United States were formerly extensive, but Consul Geo. N. West says they have entirely ceased from Kobe. With the large increase in Japanese newspapers all rags obtainable are needed for local paper mills.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8658. Cotton oil in cans.**—An American consular officer in the Levant reports that there is a strong demand in his district for American cotton oil in cans containing 2 to 5 pounds. Names of agents who will sell cotton oil thus put up may be had on application to the Bureau of Manufactures.
- No. 8659. Fireless cookers.**—Several firms in the Near East have informed an American consular officer that they would like to secure agencies for American manufacturers of fireless cookers. The consular officer states there is a growing demand in his district for this line of goods, and American firms would do well to take advantage of the opportunity offered.
- No. 8660. Shoes.**—An American consular officer in Asia Minor reports that a strong house in his district is planning to open stores for the exclusive sale of American footwear. American manufacturers in this line should get in touch with this firm as soon as possible.
- No. 8661. Dress trimmings, millinery, ribbons, and knitted wear.**—A manufacturer's agent in the United Kingdom is seeking to obtain agencies for American manufacturers of dress trimmings, ribbons, millinery novelties, and knitted wear. He informs an American consular officer that he has had nine years' experience with the goods which he desires to handle, and he offers to supply references to anyone interested.
- No. 8662. Sugar machinery.**—An American diplomatic officer reports that the progress of the sugar industry in a Central American country might result in the sale of some sugar machinery if catalogues, price lists, etc., were sent to certain persons whose names he furnishes.
- No. 8663. Gunstocks.**—In response to inquiries from the United States, an American consular officer reports that an engineer and government contractor in his district is authority for the statement that a concession is open for a large number of gunstocks for a certain foreign government. This person desires to get in touch with some American manufacturer of this article. As the time for receiving bids is short, communications should be addressed direct to the inquirer with the least possible delay, lowest possible wholesale prices, *c. i. f.*, certain city should be stated, and also the time required to deliver a large order.
- No. 8664. Children's clothing.**—A wholesale and retail firm in France, selling men's, boys', and children's clothing, would like to receive from American manufacturers catalogues and price lists of children's "rompers" and play clothes, with a view to acting as exclusive agent in that district for such manufacturers. The American consul who submitted the report states that correspondence may be in French or English.
- No. 8665. Coal depositories and wharf enlargement.**—An American consul in a Latin-American country reports that an official is taking steps to have a concession granted by the Government for the establishment of coal depositories and the enlargement of a certain wharf. He has expressed a desire to interest American capitalists in this proposition, with a view to turning over the concession to them. Further particulars contained in the report can be obtained by interested persons upon application to the Bureau of Manufactures.
- No. 8666. Government loan.**—A telegram has been received from an American consular officer stating that a foreign government has decided to negotiate a loan for the reconstruction of the burnt section of a certain city in the country. The amount of the loan will be \$1,500,000.
- No. 8667. Oilskin capes and mackintosh overall leggings.**—The American consulate general at Cape Town, South Africa, has forwarded a notice regarding tenders for oilskin capes and mackintosh overall leggings for the Department of Posts and Telegraphs, Cape Town. Copy of this notice can be obtained from the Bureau of Manufactures. Bids must be received by June 5. Samples of both of these articles have also been dispatched, and when received will be loaned to interested persons or firms by the Bureau of Manufactures.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 604. Construction of public buildings.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring, and lighting fixtures) of the following buildings: (1) Until May 21 for post office at Alameda, Cal. The building will be one story and basement, and has a ground area of approximately 6,100 square feet; fireproof construction throughout except roof; stone facing; tile and tin roof. (2) until May 24 for post office at Bonham, Tex. Building is to be nonfireproof; one story and basement, of approximately 4,230 square feet ground area; brick faced with stone trimming. (3) Until May 25 for post office at West Point, Miss. Building is to be one story and basement, of approximately 4,160 square feet ground area, brick faced with stone and terra-cotta trimming and tile roof. (4) Until May 27 for post office at Westfield, Mass. Building will be one story and basement, has a ground area of approximately 4,350 square feet; fireproof construction except roof; stone and granite facings. Drawings and specifications of these buildings may be obtained from the custodians of sites at the various points, or of the Supervising Architect.
- No. 605. Coal.**—Sealed proposals for furnishing coal will be received at the office of the Lighthouse Inspector, Third District, Tompkinsville, N. Y., until May 3, 1912. Blank proposals, specifications, and other information may be had upon application to that office.
- No. 606. Pile and reenforced concrete pier.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until May 11, 1912, for a pile and reenforced concrete pier at the navy yard, Philadelphia, Pa. Plans and specifications can be obtained on application to the bureau or to the commandant of the navy yard named.
- No. 607. Artesian well.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until May 22, 1912, for drilling an artesian well in the United States post office, Minneapolis, Minn., in accordance with specification, copies of which may be had at the office of the superintendent of building at Minneapolis, Minn., or at the office of the Supervising Architect.
- No. 608. Motor survey launch.**—Sealed proposals for constructing the motor survey launch *Captain J. J. Meyler* will be received at the United States engineer office, Jacksonville, Fla., until May 15, 1912. Information on application to J. R. Slatery, Captain, Engineers.
- No. 609. Electric passenger elevators.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until May 28, 1912, for an electric passenger elevator in the United States post office and courthouse, Shreveport, La., and for an electric passenger elevator in the post office, Lander, Wyo., in accordance with specifications and drawings, copies of which may be obtained at the office of the Supervising Architect.
- No. 610. Supplies for field medical service.**—Sealed proposals, in duplicate, will be received at the field medical supply depot, United States Army, 21 M Street N.E., Washington, D. C., until May 15, 1912, for furnishing and delivering the following articles: 7,500 blankets, gray, 66 by 88 inches, to weigh not less than 5 pounds each; 4,000 suits pajamas, outing flannel, fast colors, sizes 36, 38, and 40; 6,000 pillowcases, cotton, completed pillowcase to measure 17½ by 29 inches; 6,300 sheets, cotton, warp 88, filling 82, completed sheet to measure 50 by 86 inches; 2,000 rolls muslin, to be made up in same manner as standard sample; 1,000 cases, canvas, for bedding; 3,000 pouches, hospital corps, canvas, empty; 500 yards muslin; 150 cases, operating, small; 400 pounds absorbent cotton; 2,000 boxes, packing. Bids will also be received on chests made either of basswood, iron bound, or of three-ply veneer, fiber covered, samples of which may be seen at the depot. Further particulars can be obtained of Maj. C. R. Darnall, Medical Corps, United States Army, in charge of depot. (Circular No. 112.)

NOTES FROM NEW BRUNSWICK.

[From Consul Theodosius Botkin, Campbellton, Canada.]

Purchases of Automobiles.

Several additional automobiles have recently been ordered and a number of others are being negotiated for by people in this community. Altogether at least nine new cars will be added to the number in evidence last year. Four will be direct importations from American manufactories; the others of American origin from branch establishments in Ontario, where the parts are assembled and the cars finished. There is also much discussion of a proposition to establish a local garage, with four or five touring cars, to accommodate the public and especially summer visitors to Restigouche camping and fishing resorts.

Coal Imports.

This community consumes annually 3,000 tons (six cargoes) of Pennsylvania anthracite, imported direct from New York. The town requires 500 tons for its power plant and town offices. The expenses per ton are: Freight, \$1.50; insurance, 10 cents; wharfage, 5 cents; discharging, 20 cents; and drayage, 20 cents; total, \$2.05. The coal now retails at \$8 and \$8.25, according to grade, delivered. The consumption of soft coal is very large. It all comes from Nova Scotia mines.

Pulp-Wood Shipments.

Certain Maine paper mills have contracted for 50,000 cords of rossed pulp wood, to be delivered on board at Dalhousie and another point, and have chartered two steamers for that service. The first of the shipments is to be made early in May. The average cargo for steamer is 2,200 cords, and 10 such cargoes were shipped from Dalhousie to American mills in 1911.

Caution Against Potato Imports.

People who have been hoping to obtain new varieties of seed potatoes from the importations from Scotland and northern Europe, and therefore adaptable to this climate, are greatly disappointed by the report from Ottawa that the Dominion botanist at the Government's experimental farm has given warning of a serious canker disease among the importations from Great Britain and continental Europe.

It had been known that a potato canker had found its way into Newfoundland with potatoes imported from Europe, but no such disease had yet appeared in Canada. * * * It is one of the most serious diseases known, affecting not only the farm lands on which potatoes are grown, but also decidedly injurious to the health of the consumers of affected potatoes. Boiling does not destroy the injurious properties. * * * The disease is characterized by nобular excrescences, which are often larger than the tuber itself. These cankers affect the eyes of potatoes and are very small in the early stages. Any tubers found with smaller or larger outgrowth rising from where the eyes are situated should under no consideration be used for seed or table purposes.

Warning is given to be exceedingly careful in using potatoes that may have been imported from Great Britain or the continent of Europe, and to destroy all suspicious-looking potatoes by fire and not throw them on the ground, for the disease if present will establish itself permanently in the soil.

DAILY CONSULAR AND TRADE REPORTS

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15th Year

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FOREIGN SUGAR INDUSTRY.

PORTUGUESE EAST AFRICA.

[From Consul George A. Chamberlain, Lourenco Marques.]

The director of agriculture for the Province of Mozambique has returned from a tour through Portuguese East Africa and has published interesting information in regard to the sugar industry.

He finds that the present total output for the seven mills in operation amounts to 27,700 tons per annum. Besides these seven estates, three more are in process of development, two of which, the Movene and Incomati concerns, are in the district of Lourenco Marquez, and consequently within easy touch of that port as well as of the railway into the Transvaal. This is an important consideration, as the Union of South Africa is bound by the Mozambique treaty to receive products of the Portuguese colony free of duty for seven years to come.

The native labor employed in the production of sugar in Portuguese East Africa is estimated at 11,000 men during harvest, which number is reduced by about half at other times. The vagaries of tropical climate are illustrated by the fact that harvesting on the Zambezi occurs from May to December, while at Inhambane, a few hundred miles south, it loses a month at each end. However, the shorter season produces more sugar per man per acre. The output per man is estimated in the different districts, from south to north, as follows: Inhambane, 3 tons; Inhanguvo, 3 tons; Lusitania, 2.8 tons; Zambesia, 2.4 tons. These figures are found to be unjustifiably low, as in Natal, where the rugged nature of the country prohibits the use of steam plows, a coolie averages 4 tons.

Area—Methods—Varieties of Cane.

The total area under cane in the Mozambique Province is 30,000 acres, but not all of this was cropped this season. The general practice in cultivation is to steam plow and ridge, the furrows being afterwards straightened by hand. This suggests an opening for the

American steam harrow as a labor-saving device, labor being an item of great and increasing importance.

The method of planting is to lay the cane sections flat, end to end, in the trench, and cover them to the depth of 2 inches. In cases where the land is not plowed at all the plants are stuck upright or with a slight slant, in the soil, with the idea of protection against the borer, which is supposed to feed only on the eyes under ground. This theory, however, has not been altogether sustained. The director of agriculture sees a great need for a steam hoe, taking three rows of cane at a time.

There are between 30 and 40 varieties of cane under cultivation on the various plantations, but the Yuba predominates and has been known to attain to 12 ratoonings on the Zambezi and is still producing. This cane is adapted to free and open soils and to land that can not be irrigated, but on heavy alluvium the more luscious canes are preferred and give larger returns in sugar. Most of the Province's sugar land is heavier than that of Natal, is capable of being irrigated, and can support heavier canes.

Yield and Cost—Labor a Serious Problem.

The yield of cane per acre at Inhambane is figured at from 33 to 38 tons. In 1910 it averaged 40 tons, 10,007 tons producing 1 metric ton (2,204.6 pounds) of sugar, which works out at 4 tons of sugar to the acre. The Inhambane estate takes high rank in the Province, its records surpassing those of any other sugar property in the colony. The cost of growing and manufacturing a metric ton of sugar is \$26.75 to \$29.20. As one goes north the production per acre decreases and the cost increases to a maximum of \$43.80 per metric ton of sugar produced.

Strange to say, the limiting factor in the production of sugar in this Province is labor, on account of the fact that this colony supplies monthly thousands of natives to the Rand mines. This question of labor is rapidly becoming critical, and as the local government is bound, through the Mozambique treaty, not to restrict for seven years Transvaal's recruiting in Portuguese territory, the planters and industrialists in the Province can not see any chance of immediate relief, save possibly through the importation of coolie labor from India.

[A list of East African sugar estates, of possible interest to American manufacturers of sugar machinery, steam plows, narrow-gauge railways and rolling stock, etc., transmitted by Consul Chamberlain, may be secured from the Bureau of Manufactures.]

MEXICO.

[From Consul Wilbert L. Bonney, San Luis Potosi.]

It is generally agreed among planters and farmers in the agricultural portion of eastern San Luis Potosi that sugar cane is the most profitable staple crop that can be put in, and the acreage is accordingly increasing as rapidly as labor and capital can be secured; but the extension is slow, as clearing the land is an expensive process, and facilities for handling the cane must be provided, often out of the profits of the growing crop. Around the American colony of San Dieguito there are about 5,000 acres of cane, and it is estimated that the area is increasing about 10 per cent each year.

Clearing the Land.

The cost of clearing is an uncertain but important factor, usually exceeding the first cost of the land. In the cane section sometimes 450 palm trees occur to the acre. Many of them are 60 feet high and 18 inches in diameter at the base. These palms, said to be suitable for pulp manufacture, are wasted, with the exception of a few used for fences and fuel. They are cut down at a cost of \$1.50 per hundred, but the expense of dragging them off the land and piling is two or three times greater. It requires several years to dry them for burning. If a large area is to be cleared, a traction engine is often used. When it can be done, it is undoubtedly better to pull the trees out than to cut them, as the stumps will not rot for several years and the yield in cane will more than pay the extra expense. Of course, the small farmer can not always spare the time and capital, and by planting stumpage land he can get in more cane and secure quicker returns, but the stumps interfere with plowing and planting, besides taking room. It is estimated that the gross returns from land with stumps removed will be 50 per cent greater than from stumpage land.

With a traction engine, pulling sometimes six trees at one draw, 600 trees can be uprooted in 10 hours at a cost of about \$5 for the day's work. The work of dragging them away and piling is estimated at \$10 for 600 trees, making a total of about \$10 per acre for clearing off a thick growth of palms. Plowing and planting is estimated at \$15 per acre, so that the cost of preparing palm land and starting a cane crop may be roughly placed at \$25 per acre. If done on a small scale, the cost might greatly exceed these figures, while large planters, with machinery and system, claim they can do the work for less. When the work is done with mules the trees must be cut into several pieces after felling. Dragging the trees over the land fills up the cavities made by uprooting. The best cane soil is that which produces heavy bamboo and a thick growth of palms. If a traction engine is used in clearing, it becomes a valuable asset later for running a cane mill, pumping, and hauling.

Yield per Acre—Cost of Land.

The sugar-cane industry as conducted in this section is suited to small-scale production as well as to large sugar-plantation methods, as there is an excellent local market for the raw sugar molded into cones, which sell at times for higher prices than can be obtained for refined sugar. Mills for grinding are purchased from the foundry in San Luis Potosi. A mill with a capacity of 5 tons per day can be purchased for \$1,000, without power, and smaller mills for proportionately less.

One tract of 15 acres of new land, without irrigation or fertilizer, last year yielded the high average of 42 tons of Mexican cane to the acre. The small planter without a sugar mill can sell his cane to neighboring mills for about \$2.50 per ton, if he is located favorably with regard to transportation. One small planter this year is said to have taken 4,800 pounds of raw sugar per acre, selling it at \$12.50 per carga of 400 pounds, realizing \$150 gross per acre from his small tract. Another planter states that he realized \$7 per ton of cane, which at 30 tons to the acre, would represent a gross return of \$210 per acre. Each man's experience differs with the methods used,

the scale on which operations are conducted, the exact nature of his land, and the accidents inseparable from pioneering.

Land of first quality in the section referred to, within 5 miles of the railroad, can not be had for less than \$15 per acre, and closer in for \$25 to \$40 per acre. Land that is classed as prairie, with small brush and tough bunch and other native grasses, ranges from \$12.50 to \$20 according to location. Such land is not so good for cane; it may produce two or three satisfactory crops, and then the cane gradually deteriorates. Land that overflows, where the water runs off with the receding streams, is the best for cane, as such land is almost always covered with palms and bamboo, and the annual inundation of the rainy season deposits the silt which returns what the cane takes away. Such land will produce heavily and indefinitely without fertilizer or irrigation.

Profits and Production Charges.

The small planters give little attention to net figures and usually allow nothing for their own labor in stating their returns. It is probable, however, that both their gross and net returns per acre exceed those of the large producers. A small tract selected for special adaptability to cane growing, with the personal supervision of the owner, can be made to show a gross return of upward of \$200 per acre, while large planters operating a numerous force of native help over varying lands do not claim a gross return greatly exceeding \$140 per acre.

One of the largest planters of the district, who keeps full cost accounts, furnishes the following data for the grinding of 1911: Cane cultivated, 1,288 acres; average yield per acre, 19.96 tons; first, second, and third year stubble yielded 25 to 30 tons per acre. The low yields were from stubble 5 to 12 years old. An experiment with D74 cane yielded 35 to 40 tons per acre. Mexican cane was produced at an average cost of \$1.21 per ton. Grinding was in progress from January 1 to June 1, the mill extraction being about 65 per cent. An average of 1 ton of sugar was produced from 10.07 tons of cane. The sugar for the most part, was sold as fast as produced, and therefore the planter did not receive the benefit of the rise in prices occurring the latter part of the year. The granulated sugar was sold delivered at nearest railroad station, for 3.38 to 3.86 cents per pound. The seconds were sold for 2.47 cents per pound. From the same cane there were produced about 152,000 liters (liter=1.0567 quarts) of alcohol, the selling price being 13 cents per liter. The cost of all sugars from planting to delivery, not allowing interest on capital, is figured at 1.095 cents per pound. The average mixed-juice analysis for the season was as follows: Brix 18.2°, Beaumé 10.1°, sucrose 15.7 per cent, purity 86°.

Cultural Methods.

The development of the cane lands depends much upon the improvement of transportation, which is a controlling factor in the outlying sections. Small custom mills located among small planters would no doubt find sufficient business, since in the present stage of the industry grinding takes time which might be given to clearing, cultivating, and extending operations. The methods of planting and cultivating have not been systematized and consist chiefly of traditional native methods modified by the American planters to suit their own practice.

The latter have not yet had time to experiment; their anxiety has been to get their land planted. Another reason for adopting temporary methods is that the land is so cheap as compared with the product that there has been no inducement to undertake close cultivation. (For further data regarding the cane district and results of 1910 grinding, see Daily Consular and Trade Reports of June 16, 1911.)

GERMANY.

[From Consul Alfred W. Donegan, Magdeburg.]

The exports of sugar from the German Empire were unusually small during the first two months of the present calendar year. This was doubtless due, in part, to the fact that England, customarily a large purchaser of German sugar, imported little sugar from Germany during January and February. [British official statistics show imports into the United Kingdom from Germany of 7,336,947 English hundredweight of refined sugar and sugar candy and 7,838,251 hundredweight of unrefined sugar, valued respectively at \$25,861,635 and \$20,863,880, in the calendar year 1911, each total being an advance over the corresponding figures for 1910.—B. of M.] It is said that English importers are awaiting a decision regarding the proposed increase in Russia's sugar exports under the Brussels convention.

The marked falling off in German shipments of sugar during the current campaign is shown by the following table of exports for the six months, September, 1911, to February, 1912, and of the corresponding periods during the past 10 years, given in hundredweight of 110.23 pounds and representing raw sugar quantities:

Campaign year.	Exports.	Excess over 1911-12.	Campaign year.	Exports.	Excess over 1911-12.
	<i>Cwt.</i>	<i>Cwt.</i>		<i>Cwt.</i>	<i>Cwt.</i>
1911-12.....	2,748,800		1906-7.....	12,481,700	9,732,900
1910-11.....	9,788,800	7,040,000	1905-6.....	10,396,400	7,647,600
1909-10.....	9,022,300	6,273,500	1904-5.....	7,561,900	4,813,100
1908-9.....	7,460,100	4,711,300	1903-4.....	8,179,000	5,430,200
1907-8.....	10,066,100	7,317,300	1902-3.....	9,141,900	6,393,100

The total exports during the season 1911-12 were 5,935,900 hundredweight less than the average for the past 10 seasons. The enormous decrease is in large part ascribable to the poor crop of last season, which was scarcely more than large enough to supply the demand for local consumption.

[From Consul General A. M. Thackara, Berlin.]

Invert Sugar in Germany.

There are no data available which would indicate exactly the production of invert sugar, but according to official statistics there were 2,323 metric tons (2,204.6 pounds each) of liquid refined sugar inclusive of invert sugar sirup manufactured in Germany in the year ended August 31, 1911, as against 2,619 metric tons during the preceding campaign year.

Invert sugar, which was first manufactured in Germany for commercial purposes about 20 years ago, is used for the improvement of wine, for the production of wine according to Petiot's process, in the

preparation of champagne, liqueurs, fruit preserves, and fruit sirup, and especially as a substitute for honey.

To produce invert sugar a solution made by dissolving very pure cane or beet sugar is heated to the boiling point in a closed receptacle and then passed into another closed vessel by means of an injector operated by carbonic acid with a pressure of at least four atmospheres. The second receptacle should contain carbonic acid of 0.25 to 0.5 atmospheric pressure. The sugar solution dissipated to a vapor is inverted by the carbonic acid. In this process formic acid and mineral acids can also be used instead of carbonic acid.

Exports—Uses of Glucose.

The inversion produces a colorless sirup that is sweeter than cane sugar, whose taste is more pleasant than that of rock candy, and which does not crystallize. Only when exposed to light does a portion of the dextrose separate itself from the rest of the solution. It is impossible to distinguish invert sugar from pure honey without making tests.

Statistics of the import and export trade do not differentiate invert sugar, but it would probably be classed under the following head: "Starch sugar (grape sugar, glucose, dextrose, maltose), fruit sugar (levulose), and other kinds of fermentable sugar not otherwise mentioned, crystallized or in the form of sirup; also dextrin sirup and burned sugar of all kinds." The total German exports under this classification during the last two calendar years, valued respectively at \$190,638 and \$214,438, were as follows in metric tons:

	1910	1911
Total exports.....	2,849	2,771
To Great Britain.....	790	840
To Switzerland.....	1,438	1,417

No statistics are available giving the amount of invert sugar used as an adulterant in honey nor the amount of glucose employed as an adulterant in candies, etc. However, I am informed that glucose is used for the preparation of wine; as a substitute for malt in breweries; as a substitute for honey in bakeries and biscuit factories; to adulterate sirups and honey; to manufacture artificial honey; in mustard and tobacco factories; in the manufacture of liqueurs, bonbons, fruit sirup, conserved fruits, etc.

[From Consul General Robert P. Skinner, Hamburg.]

Invert Sugar as a Substitute for Honey.

Invert sugar is an amorphous compound ($C_6H_{12}O_6 + C_6H_{12}O_6$) consisting of equal parts of dextrose and levulose, occurring in nature as a normal constituent of honey and certain fruits, produced by the action of ferments or by heating sugar cane with dilute acids.

Its principal use is as an adulterant of or substitute for honey, and according to the statements of the most important manufacturers of sugar goods in Germany its production is quite limited. To give to invert sugar the characteristic aroma of honey, a small quantity of natural bees' honey is added, or the product is exposed to the aroma of linden or rape blossoms. It is said that artificial honey of this kind can not be distinguished from the natural product. No men-

tion of this particular kind of sugar appears in official export statistics, and it is impossible to ascertain the amount of domestic consumption.

Methods of Manufacture—Prices.

A recommended method of manufacture has been invented by E. Besemfelder, according to which a solution of saccharine of about 70° Brix and of a purity quotient of 98° or 99° is inverted by means of 1.5 per cent of sulphate of aluminum while heated to a temperature of 85° during three hours. Thereupon a solution of aluminate of barium or strontium, which should be as concentrated as possible, is added until it is neutralized, and the whole is finally heated in a weak current of carbonic acid of a temperature of 100°. Through the latter portion of the process the solution is freed from all salts and needs only to be filtered and steamed in vacuum.

According to Swedish patent No. 14979, issued in 1902, it was claimed that a pure and clear sirup of good taste could be obtained from molasses. The sugar mass after having been acidulated is added to a more or less invert-sugar solution previously prepared. The invert-sugar solution should be made of sugar having a very low content of ash and which has been manufactured from the original sugar mass.

Raw invert sugar can be fermented directly. It is stated that invert sugar is used in the manufacture of still wine, champagne, and liqueurs. The price of this sugar to-day (Feb. 20) is 43.50 marks per 100 kilos (\$10.35 per 220.46 pounds) in barrels of 300 kilos f. o. b. Hamburg.

FRENCH OLIVE CROP.

[From Consul General A. Gaulin, Marseille.]

While fairly abundant in certain districts, the French olive crop for the year 1911-12 appears to be of only average size. In the Var the production is estimated at 18,950 metric tons, as compared with 22,000 tons for the previous year. There are no available statistics for the other regions. The total crop in 1910 was 71,084 tons, as compared with 48,582 tons in 1909 and 125,212 tons in 1908.

A ministerial decree promulgated on March 24 fixes at 18 francs per hectare, or \$1.40 per acre, the rate of bounties that will be distributed to the French olive growers for the year 1911. As stated in a previous report [Daily Consular and Trade Reports, for Dec. 30, 1911] the minimum number of trees required per hectare varies according to the cultural methods prevailing in the different districts.

COPRA OF AMERICAN SAMOA.

[From J. L. Dwyer, Secretary of Native Affairs, Pago Pago.]

The bids for the copra crop of Tutuila, the South Sea island possession of the United States, were opened on March 1, 1912. A German firm of Apia, Samoa, bid \$77 per ton of 2,240 pounds, while several other firms bid \$84 to \$85. The tender of the Pacific Oil and Lead Works, of San Francisco, Cal., at \$93.75 was accepted. The area of Tutuila (American Samoa) is 54 square miles, and copra is the principal crop, the exports of which in the fiscal year 1911 amounted to \$51,049 worth to Japan and \$99,040 worth to the United States.

CONSTRUCTION WORK ABROAD.

CANADA.

[From Consul Abraham E. Smith, Victoria.]

Rapid Development on Vancouver Island.

The remarkable progress made on Vancouver Island during the past five years continues in 1912.

Bank clearings in Victoria for the first three months aggregated \$37,759,723, compared with \$31,350,917 for the first quarter last year. Building permits aggregated \$2,852,725, compared with \$614,340 in January, February, and March, 1911. Dominion statistics for 1911 show that the largest actual building gain in Canada (\$1,458,130) is credited to Victoria, of which \$1,000,000 was for enlarging Parliament buildings. Victoria's municipal estimated revenue for 1912 is \$1,633,410, and estimated expenditure \$1,625,460. Customs revenue for the fiscal year ended March 31, 1912, reach \$1,984,893, an increase of \$449,600 over the previous year. Construction items of interest follow:

Victoria.—A contract just signed for a new \$150,000 building for the Northern Crown Bank covers an 8-story reinforced concrete structure.

Bids will soon be asked for the new \$100,000 First Presbyterian Church, to seat 1,200, with schoolhouse seating 500.

Plans are being drawn for an amusement house to be erected for the National Vaudeville Co., which controls theaters in Vancouver, Nanaimo, and New Westminster.

Andrew Sheret is erecting a \$43,000 three-story brick block of 6 stores and 48 rooms.

Nanaimo.—The Western Fuel Co., owned by San Francisco parties, is constructing a sea wall and water front road here, to cost nearly \$1,000,000, to provide increased wharfage for the growing business of the company. It is stated that the total receipts of the city for the current year amount to just under \$100,000, all to be expended on civic improvements.

Wellington.—The Pacific Coast Collieries Co., owned by New York capitalists, is installing a new plant at South Wellington and Suquamish, which will increase its daily production from about 800 tons to 3,000 tons.

Comox.—The Canadian Collieries announce that \$2,000,000 will be spent in improvements. Steam will be replaced by electricity. A hydroelectric plant to develop power will be built at Putledge River, to cost \$750,000, and 6½ miles of railway will be built to the new No. 8 shaft being opened. Clarence Hoard, an American engineer, has contract for railroad work. The enlargement will give employment to 700 additional miners.

Duncan.—A new \$15,000 railroad depot is being erected and new freight sheds are to be built. The Dominion Government is also erecting a \$50,000 building for post office, customhouse, and Indian office. Another station on E. & N. Railway is to be erected a few miles south to be called Malahat.

Quatsino.—The American town builder, Col. Montgomery, the original locator of Fort Worth, Tex., has bought a large tract of land here and proposes to lay out a town site.

American engineers.—The provincial government has engaged, for 5 years, R. H. Thomson, for 22 years city engineer at Seattle and later harbor engineer there, to superintend laying out the great Strathcona Park of 248 square miles on this island, at \$15,000 salary, while the mayor of Victoria has offered A. H. Dimock, present city engineer of Seattle, \$7,500 a year if he will accept the post of city engineer.

[From Consul General John G. Foster, Ottawa.]

Construction of Railway Car Shops.

Sir William Mackenzie, president of the Canadian Northern Railway, has announced that car shops are to be built in the vicinity of Ottawa. A large acreage of land has been secured for yards and shops, but no definite information has yet been given as to the size of the proposed shops.

[From Consul Theodosius Botkin, Campbellton, New Brunswick.]

New Business Structures, Hospital, Opera House, etc.

There is a promise of much building operations at Campbellton during this spring and summer. A number of additional brick and concrete business structures are contemplated, and a fine new hospital and numerous dwellings are planned. Great local interest has been aroused in the current report that a company is planning to erect a large fireproof opera house, the building alone to cost \$40,000 to \$50,000, on a site facing 100 feet on the principal street.

[From Consul Fred C. Slater, Sarnia.]

Winter Harbor Plans Recalled.

The press announces that the project of building a winter harbor on Sarnia Bay, Ontario, has been recalled and that the harbor plans and specifications have been ordered returned to the department at Ottawa and the receiving of tenders for the proposed work canceled.

CHILE.

[From Consul Alfred A. Winalow, Valparaiso.]

College, Station, Car Shops, and Presidential Palace.

Sr. Arnaldo Grindlerlach has been awarded the contract to reconstruct the Santiago Agricultural College at a cost of \$20,000 (United States gold).

Appropriations have been made for constructing a railway station and car shops at Santiago to cost \$91,250 and \$57,717, respectively.

It is expected work will begin early in 1913 on the proposed new President's Palace at Santiago, Chile, to cost about \$1,100,000. The plans are well under way.

GERMANY.

[From Consul Herman L. Spahr, Breslau.]

Construction Work in Breslau District.

Hospital.—The erection of a county hospital, to be opened in the summer of 1913, will be begun soon at Koschmin, Posen. The cost of building is estimated at \$26,000. Address: Kreisausschuss, Koschmin, Posen.

Schools.—An eight-grade schoolhouse will be built this spring at Hermsdorf unter Kynast. Address: Schulvorstand, Hermsdorf u/K, Silesia. At Eichenau, Oberschlesien, a six-grade school is projected. Address: Schuldeputation, Eichenau, O/S.

Linen mill.—Mr. Paul Trobitz, of Schmoelin, Sachsen-Altenburg, contemplates putting up a linen-weaving mill at Alt-Laessig, Bez. Breslau.

Mining equipment.—At the Donnersmarck mine the following additions are planned: (1) Construction of track scales; (2) conveyor for ashes from the boiler house; and (3) electric lighting for the workmen's colony. Address: Die Verwaltung der Donnersmarckgrube, Schwientochlowitz O/S.

Shooting gallery.—The rifle club of Niederhermsdorf, Kreis Waldenburg, Silesia, has given a contract for putting up a shooting hall and stand at a cost of about \$5,000.

PHILIPPINE ISLANDS.

[From Consul General George E. Anderson, Hongkong.]

Plans for Railway Extensions.

On January 23 there was signed the contract between the Philippine Government and the Manila Railway Co. for loans on the part of the Government of funds for the extension of the company's railway lines in the south of Luzon, the total advances for the work ultimately to be about \$2,250,000.

The general railway situation in the islands is indicated by Governor General Forbes in his annual message to the Philippine assembly, in the course of which he said:

I am glad to be able to inform the legislature that the effect of the construction of railroads has been more beneficial even than had been hoped. The Manila Railroad Co. during the year has opened up its lines to the following points: Batangas, on the Manila-Batangas line; San Pablo, on the Luta-Lucena line; Mojon, on the Calamba-Santa Cruz line; Santa Cruz, on the Noveleta-Naic line; and Rosales, on the Paniqui-Tayug line. The opening up of these railways has had an almost magical effect in stimulating industry and fostering production; territory in which crops had not been harvested for years is now being cared for; and particularly in the Provinces of Batangas, La Laguna, and Tayabas the advent of the railroad seems to have made the difference between a backward and a progressive situation.

Lines Under Construction and Projected.

The railroads mentioned and under construction include the 73-mile line from Manila to Batangas, now complete, the 40-mile line from Luta to Lucena, of which about 25 miles are completed; the 27-mile line from Calamba to Santa Cruz, of which about 15 miles are now completed; the 30-mile Noveleta-Naic line, of which about 10 miles are complete; and the 28-mile Paniqui-Tayug line, of which about 12 miles have been completed. These railways are constructed under the company's contract with the Government made in 1906. The sections covered by the new contract are between Lucena and Legaspi, and aggregate 110 miles, and the projected system is to include a branch to connect this through line with a new port to be established on the east coast of Luzon.

The Government has also contracted for the immediate advancement of the work on the Aringay-Naguilian Railway, which is to complete the connection of Manila with Baguio, the summer capital. In all about 350 miles of railway are under construction, or contracted for, to be completed by 1918.

[Additional information relative to Philippine railways appeared in Daily Consular and Trade Reports on Dec. 21, 1911.]

SOUTH AFRICA.

[From Consul Nathaniel B. Stewart, Durban, Natal.]

Abattoir, School, Law Court, etc.

Work has just commenced on a new municipal abattoir which is to be one of the most up-to-date structures of its kind in the world. The estimated cost is \$165,461, and its completion is expected within 12 months.

The new \$140,000 building of the Durban Technical Institute has been completed. The institute is similar to American technical schools, and it is hoped that it will finally produce sufficient locally trained skilled workers of all kinds to supply the country's needs.

The new \$390,000 Law Courts building, of Durban, is nearing completion. It contains rooms for the circuit court, the native high

court, and four for magistrates' courts, also quarters for public works and provincial police officials.

A Cape brewing company is erecting at Durban a branch brewery to cost \$45,000. A Johannesburg company is erecting a new bioscope theater at a cost of \$40,000.

There would not have been sufficient time for American contractors to examine plans and submit bids on construction work for the foregoing buildings unless locally represented. The operations are only mentioned to show the general industrial progress of the district and the utilization of large amounts of materials and supplies.

SALE OF AMERICAN GOODS IN PERU.

[From Vice Consul Charles Lyon Chandler, Callao.]

The primary questions affecting the sale of American goods in Peru are those of price, quality, terms, representation, distance from place of production, and local prejudice.

European articles here, when they compete, average one-tenth to one-third cheaper than American goods. This handicap is sometimes overcome by the superior quality of the American article, but before entering this field the prices and nature of the competition to be met should be accurately ascertained. Questions of quality and local prejudice are often closely interwoven. It takes time to create a local fancy for an article, and the smallest trifle may upset the regard for the quality of an article, some minute detail found imperfect perhaps sending the order to Europe instead of to the United States.

Certain phases of industrial education have been so neglected in the United States, until the past few years, that foreigners have wondered that we had any foreign salesmen at all. Much is now being done in this line, but much remains to be done toward turning out salesmen who can show their initiative in other tongues than their own. Only quiet, tactful, persistent work will land orders in Latin America, and the pusher and hustler is often misunderstood and gets no orders.

The time from Panama to Callao, shortened from 27 days in 1568 to 14 in 1900, has been halved in the past 12 years, with an increase in our exports to Peru. While the Panama Canal will shorten the voyage from the United States, it will also shorten the distance to Europe and care must be taken not to flood this market beyond the needs of its people.

METRIC SYSTEM IN DENMARK.

Consul General E. D. Winslow, of Copenhagen, advises that the metric system of weights and measures went into effect in Denmark on April 1, 1912. It will be well for business men to note this change from the old system. All merchants will be subject to fines ranging from \$2.70 to \$27 for nonconforming with the act.

Chargé d'affaires Norval Richardson, of the American Legation at Copenhagen, writes that much interest is being manifested in Denmark in the change to the metric system and that a great many prizes are being offered to merchants by various trade associations for the best display and explanation of this system.

[Complete textbooks on the metric system may be obtained free on application to the Bureau of Standards, Washington, D. C.]

FAR EASTERN TRADE NOTES.

[From Consul General George E. Anderson, Hongkong.]

Bamboo Paper Napkins—Trade Improvement—New Steamer Services.

The use of bamboo pulp for the manufacture of paper napkins is receiving particular investigation at the present time. It is proposed to use the carbonate of soda process of bleaching, but there is some uncertainty as to whether or not a supply of soda can be obtained locally.

Trade in the West River country in Kwangtung Province is gradually opening up, and large amounts of goods collected during revolutionary troubles are being exported. The increase in exports of live stock has been exceptionally large. Trade as far inland as Nanning is said to be greatly improved.

Announcement was made at the regular half-yearly meeting of the Nippon Yusen Kaisha that not only are the five new ships for the American and European trade, mentioned in Daily Consular and Trade Reports on April 2, soon to be in use, but that seven more steamers, aggregating 48,000 tons, will be constructed immediately thereafter for these and similar services. The company has already made its plans and submitted propositions to the Japanese Government for the usual subsidies for services to New York and to Brazil by way of the Panama Canal. These new lines will entail an increase in the concern's capital of \$25,000,000 to \$30,000,000, which will be raised by the issue of mortgage bonds.

New Housing Plan.

Details of a scheme are being completed in Hongkong, more or less under Government sanction, for the erection of concrete or stone dwellings for housing 150 Portuguese families, in a separate district to be known as "Cidade Camoens." The influx of large numbers of Chinese from Canton and the surrounding country as a result of continued political troubles has resulted in an abnormal demand for houses, and the consequent high rents have pressed heavily upon people of modest incomes, among the latter being particularly the Portuguese residents of Hongkong.

The proposed dwellings are to be erected upon a 150-acre tract, the larger portion of which is to be especially reserved by the Government for the erection of similar houses from time to time. The enterprise is being financed by a bond issue secured by mortgage. Houses will be leased only to approved tenants, but they may also be purchased on time payments.

The establishment of the colony will involve the construction of special schools and churches, waterworks, and similar conveniences and improvements. The estimated original outlay for the first lot of houses is \$735,000 Hongkong currency—about \$339,000 gold at present exchange.

Philippine Items.

Public works in the Philippines are to be pushed during the current season. Estimates have already been prepared for the construction of public buildings, roads, bridges, and the like, involving an expenditure of over \$500,000.

The formation of a company, capitalized at \$175,000, for the operation of a coconut-oil factory and for the manufacture of soap and

similar articles from by-products is announced at Manila. The concern has the backing of some of the more prominent capitalists of the islands.

The city of Manila is building 10 tennis courts for the use of the public in the sunken gardens opposite the city hall. The courts will have the accompaniments of baths, lockers, and reading rooms, which will be made by transforming the bastion near Victoria gate into an up-to-date club.

VENEZUELAN COMMERCIAL NOTES.

[From Consul Thomas W. Voetter, La Guaira.]

Curtailed crops.—For several months the rainfall throughout Venezuela has been much less than usual for this season. As a result pasturage for live stock on the interior plains has been scanty and crops of vegetables throughout have been much less than usual and prices have been higher. It is now believed that the crop of cacao has been seriously damaged, and the exports of this article from the coming crop will be much less.

Coastwise schedules.—A slight change in the itinerary of the coast boats of the Compañía Costanera y Fluvial is announced. In the voyage between Maracaibo and Puerto Cabello these boats will touch at Curaçao, Dutch West Indies, instead of confining their ports of call to Venezuelan ports. There are three boats in this service, *Guayana*, *Venezuela*, and *Manzanares*. All these boats are old and slow, and it is not believed that much of the trade now enjoyed by the boats of the Red D Line will be lost on account of the new service.

Reduced dock charges.—The La Guaira Harbor Corporation (Ltd.), which owns and operates the docks at this port, formerly charged on merchandise landed on Sundays, holidays, and after 6 p. m. on other days the additional sum of 4 bolivars per ton of 1,000 kilos. The additional charge for landing goods on the days mentioned has been reduced and is now 2.50 bolivars per 1,000 kilos (bolivars=19.3 cents; kilo=2.2046 pounds). This sum is in addition to the regular charge for ordinary working days and hours, which is 2 bolivars per 1,000 kilos.

Navigation impeded.—Another result of the dry season has been low water in the Orinoco, seriously interfering with navigation. One steamer of the Compañía Costanera y Fluvial, the *Delta*, ran into an obstruction, was seriously damaged, and had to be taken to Trinidad for repairs. It is now announced that other steamers of the line along the coast and river from Maracaibo to Ciudad Bolivar will not attempt to ascend the river to Ciudad Bolivar, but will end their voyage at Cano Colorado, which is near the mouth of the northern branch of the Orinoco delta. The cargo can there be transshipped to the light-draft river boats which can take it to Ciudad Bolivar.

Consular Trade Conferences.

Consul General William H. Bradley, of Montreal, Canada, reports that he expects to be in the United States during the month of April on leave of absence and that his address will be in care of the First National Bank, Ridgefield, Conn. Business men who are interested in trade with Canada, and particularly with the Montreal district, may communicate with Mr. Bradley at the address mentioned.

BRITISH COMMERCIAL NOTES.

[From Consul Albert Halstead, Birmingham.]

New Automatic Electric-lighting Plant.

The Hardware Trade Journal calls attention to a new gasoline-driven dynamo that is entirely automatic in its action. The low-speed gasoline or gas engine is equipped with an exhaust valve lifter for relieving the compression of the engine during starting and for stopping. The usual type of belt-driven dynamo, with a controller and standard type solenoid starting switch, is employed. There is a small switchboard provided with two ammeters (one for indicating the current generated and the other for showing the current used), a voltmeter, a patent relay controlling the starting and stopping of the engine, a circuit breaker, safety fuse, and voltmeter switch. The whole plant is automatic and no large storage battery is required. When light is needed the engine commences to work as soon as the switch is put on, and stops when the switch is put off.

Interurban Automobile Service.

The use of motor wagons to carry parcels between Birmingham and London [see Daily Consular and Trade Reports for Aug. 30, 1910] has proved so successful that the postal authorities are about to make an extension of the service to Manchester. A motor wagon will leave Birmingham at 9.15 p. m. with the view of reaching Manchester just before 6 the next morning, having a carrying capacity of 4,640 pounds, which it is estimated would convey some 20,000 postal parcels during the week. Post-office employees will travel with the vehicle and the sorting will be done en route, stops being made at various points between Birmingham and Manchester. At the same time a motor wagon will leave Manchester for Birmingham. The success of this service indicates that the British General Post Office will by degrees largely increase the carriage of parcels by motor van.

In connection with this development of mechanical traction it may be stated that there is an increasing tendency on the part not only of large commercial firms, but also of companies engaged in collecting, carrying, and delivering freight to use motor vehicles instead of the railroads.

American Cars in England.

An examination of a special issue of an automobile technical paper, which makes a specialty of new cars, shows that there are now on sale in the United Kingdom 25 automobiles of American make, all of which have depots in London and a number of which have agencies throughout the country. These cars are the Bedford, Buick, Cameron, Cadillac, Chalmers, E. M. F., Everitt, Flanders, Ford, Hudson, Hupmobile, K. R. I. T., Maxwell, Mitchell, Metz-Lion, Oakland, Overland, Pathfinder, Paige-Detroit, R. C. H., Seabrook R. M. C., Stanley, Stoddard, Warren, and White Petrol and White Steam. The total number of British-made cars mentioned is 69, French 48, Belgian 7, Austrian 1, Italian 7, Swiss 1, and Dutch 1.

It would appear, therefore, that the American automobile manufacturers have entered the British market with great energy, and reports indicate that they have had considerable success, despite the tendency to decry the comparative low price at which American cars are sold.

CREMATION IN SWITZERLAND.

[From Consul D. I. Murphy, St. Gall.]

Cremation appears to be rapidly gaining in popular favor, judging from the recently published annual report of the St. Gall Feuerbestattungs-Verein (Crematory Society). Of the 535 individuals who died in St. Gall, in 1911, 201 were cremated, an increase of 12 per cent in cremations over previous years.

It is remarkable that an organization, whose sole object is to reform funeral customs, should have enrolled over 800 members in a single year and boast of a membership of 3,541, and this in St. Gall, a city of less than 40,000 population. The yearly dues are 40 cents, while the entire cost for cremation is somewhat less than \$22, including coffin, flowers, urn, and care of the ashes for 20 years. In case the deceased is not a member, or where a body is brought from another place, a slight extra charge is made. Bodies of the poor are cremated without charge when it is shown that it was the wish of the deceased to have their remains so disposed of. For minors, the wishes of parents or guardians are respected.

There are now 9 crematories in Switzerland—at St. Gall, Zurich, Basel, Geneva, Berne, Lausanne, Chauxdefonds, Winterthur, and Biel, the total number of cremations in 1911 being reported as 7,750—an increase of over 22 per cent compared with 1910. The St. Gall crematory, it is claimed, is the only one in Switzerland owned and operated by a society, all the others being municipal affairs.

[For previous reports on cremation see Daily Consular and Trade Reports for Mar. 11, Apr. 15, June 25, and Aug. 17, 1908; Mar. 5 and 24, and Nov. 8, 1909, and Feb. 10, 1910.]

THE ZUIDER ZEE FISHERY.

[From Consul Frank W. Mahin, Amsterdam, Netherlands.]

The average value of the total catch of fish in the Zuider Zee is about \$600,000 a year. In 1910 it was about 25 per cent below this; in 1911 it was fully up to the average. This gain was due to the larger catch of anchovy last year, the value of which was about double that of 1910. Fewer herring were caught in 1911 than in the preceding year, but prices were much higher. The catch of flounders was also relatively small, but prices maintained the steady advance of the past five years.

The average quantity of smelt was caught in 1911, but the fish were smaller than usual, and consequently were very cheap. It has been suggested that fishing for smelt should be limited more than at present, to improve both size and price. The supply of eels was larger than in 1910, and prices were satisfactory. The catch of eels is steady and growing, as is also that of shrimps.

[Consul Mahin's review of the fishing industry of the Netherlands during 1910 was published in Daily Consular and Trade Reports on Dec. 18, 1911.]

Asiatic rice trade.—A review of the rice situation in the Far East with special reference to its bearing on Hongkong's trade in that cereal, transmitted by Consul General George E. Anderson, has been forwarded to the Department of Agriculture.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8668. Cotton carding and spinning machinery.**—An American consular officer in the Far East reports that an American corporation doing business in his district desires to hear from manufacturers of cotton carding and spinning machinery, suitable for a small factory to be run by steam. The same company would be glad to communicate with American manufacturers of hand-power cotton-spinning machinery, if any such machines are on the market. It is believed there is a good opportunity to dispose of such machines among the natives of the country in question.
- No. 8669. Textiles.**—A business man in England has furnished an American consular officer a sample of a textile which he says is manufactured in the United States. He desires to enter into negotiations with the manufacturer of this textile, so that he may make purchases, which, he states, may aggregate as much as \$475,000. The sample of this goods can be obtained by interested firms upon application to the Bureau of Manufactures.
- No. 8670. Chairs for theaters and public buildings.**—A firm in France selling furniture at retail and taking contracts to furnish theaters and other public buildings with chairs informs an American consulate that it would like to receive from American manufacturers catalogues and price lists of such chairs. Correspondence should be in French.
- No. 8671. Well-digging machinery.**—The Government of a Latin American country has voted \$10,000 for the purchase of a deep-well-sinking plant and the sinking of one or more trial wells. The ground is of alluvial character. American firms interested should address an official whose name is given in the report submitted by an American consul.
- No. 8672. Railroad material.**—According to the report of an American consular officer, plans are being completed for the construction of a railroad in certain States of Mexico. American manufacturers and exporters of all kinds of railroad material should communicate direct with a person named in the report.
- No. 8673. Hydraulic irrigation plant.**—An American consular officer reports that the erection of a hydraulic irrigation plant is being planned for pumping water from a certain river in the country in which he is located. American manufacturers interested should correspond, in Spanish, with an individual who represents the company undertaking this project. This concern might also be in need of ditching machinery, all kinds of farming implements, etc.
- No. 8674. Motor car.**—An official in an Asiatic country informs an American consulate that he is desirous of purchasing an American motor car and would appreciate illustrated catalogues and price lists c. i. f. certain city. Price lists should be in English or Indian currency. Correspondence may be in English.
- No. 8675. Kid and box calf leather.**—A commercial organization in a European country writes the Bureau of Manufactures that it has several inquiries for kid and box calf leather, and it would be glad to hear from American manufacturers of this class of goods open for export business.
- No. 8676. Maple sugar and maple sirup.**—A large wholesale grocery firm in Canada has requested an American consulate to obtain the names of American firms desirous of importing maple sugar as well as maple sirup in carload quantities. American firms desiring to establish business connections with this concern should write to the consulate referred to at once, as the Canadian firm will be ready to make shipments about the middle of May.
- No. 8677. Shoe pegs.**—The Bureau of Manufactures is in receipt of a communication from an official of a trade organization in a European country requesting the names of firms in the United States that manufacture shoe pegs and which are desirous of doing an export trade in this line. The communication states that the organization has inquiries on hand from several markets for supplies of this nature.

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ARTIFICIAL FERTILIZER TRADE.

RUSSIA.

[From Consul John H. Grout, Odessa.]

Fertilizers Are Much Needed.

The growing requirements of a rapidly increasing population, and the demands of a steadily developing trade in grain at more and more remunerative prices, necessitate timely care to provide against the exhaustion of the soil of Russia. As a measure of the rate at which this exhaustion is progressing may be taken the calculation that, in all their alimentary and fodder products taken together, the Russians annually draw from the soil about 666,000 tons of phosphoric acid and do not return to it more than 185,400 tons, thus robbing it of as much as 480,600 tons annually, a process which can not be long continued with impunity.

Artificial fertilizers are still so little employed in Russia that, on a general average, not more than 44 pounds per year of phosphoric acid are given to every 100 dessiatines of cultivated land, i. e., a little more than 2 ounces per acre. In Belgium the proportion is about 125 times as great. This explains why the crops in Russia are so small when compared with the area under cultivation. The remedy lies in the abundant use of phosphorites, phosphates, Thomas slag, saltpeter, sulphate of ammonia, and kali or potash salts. With regard to the production of these, Russia is in an unfavorable condition. Although phosphorites are found in many places in Podolia and in central Russia, etc., the industry finds an obstacle in the way of its proper development in the absence in most of these parts of the required pyrites and frequently in the poor quality of the phosphorites (coprolites).

As regards simply pulverized phosphorites, their uses are limited to special soils and conditions. Superphosphates and the materials for their production are therefore brought principally from abroad. The same applies to Thomas slag, about 18,000 tons of which is pro-

duced in Russia, and that by only one factory located in south Russia, while imports have risen from 99,000 tons in 1908 to 153,000 tons in 1911. No places are known in Russia where saltpeter can be mined profitably. Consequently practically the whole supply is imported, mainly by way of Hamburg. Some sulphate of ammonia is produced as a by-product at gas works, etc., but it is seldom used as a fertilizer, being, in fact, exported. Kali salts in quantities to repay mining cost are not known in Russia, being imported. The above easily shows that artificial fertilizers brought from long distances and passing through many hands can not be cheap in Russia, nor generally accessible, and much remains to be done in the way of cheapening methods of transportation.

DENMARK.

[From Consul General E. D. Winslow, Copenhagen.]

Large Increase in Imports—Scientific Soil Treatment.

The Government makes about 1,500 experiments every year in different localities with fertilizer. The farmers are thus taught the scientific treatment of their land. In 75 per cent of the treatments a much larger yield per acre is obtained, and the experiments prove almost infallibly the necessity of properly "feeding" the soil. The import of artificial fertilizer shows a yearly increase. In 1870 only about 30,000,000 pounds were imported, while recent annual imports reach 300,000,000 pounds, of an estimated value of \$2,700,000. Yet the authorities say that the use of fertilizer is comparatively small and many vast areas could be made very productive by the use of fertilizer. Of course, all farmers use stable refuse to a certain extent. It is estimated that the average cost of fertilizer now used is about 54 cents to 1½ acres.

Agricultural and cottage societies in the Kingdom offer members fertilizer at cost price and furnish advice and instruction as to the treatment of the soil. Upon a request by a member an intelligent examination of the farmer's soil is made. In the production of rye in Jutland artificial fertilizer has given good results. Chile saltpeter, superphosphate, and potash are the principal ingredients, although experiments made with Chile saltpeter and superphosphate alone brought fine returns. The use of potash alone did not give any increase in production.

ITALY.

[From Consul General James A. Smith, Genoa.]

A Trust in the Chemical Fertilizer Industry.

There has been formed at Milan the Super-Milano, with about \$100,000 capital, its purpose being to control the sale of chemical fertilizers in Italy. The sale of superphosphate products of the following firms in northern Italy will be controlled by this new company:

Unione Italiana fra Consumatori e Fabbricanti di Concimi e Prodotti Chimici, of Milan; Fabbriche Riuniti Agricoltori Italiani, of Milan; Fabbrica Sale di Bario, Concimi ed Altri Prodotti Chimici, of Milan; Seesa Cantu di Carati Giussani, De Bernardi e Co., of Milan; Prodotti Chimici Superfosfati, of Vercelli; Fabbrica Concimi, of Pordenone; Ligure Lombarda, Prodotti Chimici, of Genoa; Fabbrica Concimi Chimici, of Brescia; Industria Chimica Fossanese, of Fossano; Società Anonima

Bolognese per l'Industria dei Concimi e Prodotti Chimici, of Bologna; Società Anonima Cooperativa Concimi Chimici, of Lendinara; Fabbrica Cooperativa di Perfosfati, of Cerea; Fabbrica Perfosfati, of Udine; Stabilimento Industriale Rosetti, of Forlimpopoli; Tito Campani e Co., of Borgo S. Dormino; Carlo Biraghi e Co., of Parma; Francesco Marinoni, of Este; Cav. Ernesto Lucca, of Vercelli; Angelo Scaini, of Udine.

[From Consul Arthur Garrels, Catania.]

Extensive Use of Fertilizers.

Prof. S. Accardi, director of the Circuit Seat of Agriculture of Girgenti (Direttore della Cattedra Ambulante di Agricoltura di Girgenti), in an article on the utilization of artificial fertilizer in Italy gives some statistical information, which in part follows:

Sicily consumes to-day about 67,000 tons of superphosphate and about 220 tons of Scorie Thomas (phosphate slag). Superphosphates and chemical fertilizers are used most largely in the culture of beans and leguminous forage products, while Scorie Thomas is used to neutralize the deficiency of lime in rich black soils.

According to figures furnished by Dr. G. Azimonti the annual consumption in pounds per acre of superphosphates by the various Provinces of Sicily are as follows: Caltanissetta, 46.4; Catania, 16.1; Girgenti, 66; Messina, 3.5; Palermo, 16.1; Siracusa, 5.3; and Trapani, 11.6. It is estimated that fully \$7,913,000 worth of phosphate fertilizer is used annually in Sicily.

Rainieri estimates that the average consumption per acre of phosphate fertilizer in Italy during 1909 was 114.7 pounds for a cultivated area of 51,515,297 acres. Italy spends yearly over \$20,072,000 for fertilizing substances. About \$15,051,000 of this amount represents the value of phosphate fertilizers and the remaining \$5,018,000 that of fertilizing substances containing nitrogen and potassium.

CHINA.

[From Consul General George E. Anderson, Hongkong, Jan. 4.]

Bone Meal Trade.

There has been a considerable increase in shipments of bone meal from India and the East Indies to the United States by way of Hongkong during the past few months. Considerable trade has been carried on in this commodity for some time between India and the Pacific coast, Hawaii, and Australia. Hongkong has been a port of transshipment, where the meal has been stored and shipped after being brought within the requirements of the American quarantine laws. Shipments from India have generally been made on option of transshipment at Hongkong for the United States, including Hawaii, or to Australia. After considerable agitation freight rates across the Pacific on this commodity were lowered, with the result that the trade has almost doubled in the past two months. There is strong demand for this fertilizer in Hawaii for sugar plantations and the Pacific coast is increasing its imports apparently in proportion to lowering freight charges.

[From Consul General Roger S. Greene, Hankow.]

The Supply of Bones.

A California firm makes inquiry regarding bone meal. There are no bone-meal factories in this vicinity at present, though it has been reported that a French factory may be established here to grind bones and also to manufacture small articles of bone. Under the present unsettled conditions it is impossible to state when this project will be realized.

As regards bones, the customs returns state that in 1910 the exports to foreign countries (practically all to Japan) amounted to 14,914,000 pounds, while exports to Chinese ports came to 2,161,466 pounds.

A local merchant informs me, however, that he understands the total quantity of bones available in this neighborhood to be about 300,000 piculs, or 40,000,000 pounds per annum, with considerable variation, according to the number of cattle killed for their hides. If the prices of hides are high the quantity of bones on the market will be large. The state of the exchange between gold and silver also has to be taken into consideration for this purpose. My informant states that there is a large export of bones to Ningpo and Shaoshing, where they are burned, ground, and used for fertilizer.

Prices vary from 1.10 to 1.70 Hankow taels per picul of 133½ pounds. This would be equivalent, at the United States official valuation of the Hankow tael for the December quarter of 1911 (\$0.588), to from 65 cents to \$1 gold per picul, or from 49 to 75 cents per 100 pounds, this being for average sizes and quantities. Apparently, prices do not vary much according to the time of year. It is stated that the largest quantities arrive in the hide season, from December to April.

CANADA.

[From Vice Consul Geo. W. Stephenson, Jr., Yarmouth, Nova Scotia.]

Fertilizer from Dogfish.

Information is sought as to the operations of the dogfish reduction works at Clarks Harbor, concerning which an article appeared in Daily Consular and Trade Reports for May 27, 1911. The liver oil secured is marketed crude, bringing 38 cents a gallon at the factory. In making the fertilizer the fish are first cooked, then pressed, and finally run through a drier. No great difficulty has been found in making this fertilizer, and the approximate price received at the factory is \$28 a ton.

WEST INDIES.

[From Consul Thomas R. Wallace, Fort de France, Martinique, F. W. I.]

Phosphate Mining on French Island.

An inquiry is made regarding the "new deposit of phosphate rock on the island of Connetable, which is off the coast of French Guiana," and "if the old deposits of both phosphate and guano are being worked at the present time." Connetable Island is far from this place, but an official who is familiar with the island has furnished the following information:

The Grand Connetable Island, off the coast of French Guiana, is a French possession. It is intended to be used as a lighthouse station by the French Government, and this fact will limit to some extent the removal of phosphate rock now being worked on the island.

The deposit of phosphate rock is found about 7½ miles from the mouth of Approuague River. It was about 165 feet high originally, but large quantities have been removed and it is now much lowered. The phosphate is found within a radius of 1½ miles. The deposit has been worked about 40 years. No new deposit has been reported. The rock contains aluminum and lime phosphates and is worked principally for the extraction of aluminum. It contains acid phosphates 33 to 38 per cent, lime 0.50 to 1.60 per cent, sesquioxide of aluminum 50 to 55 per cent.

The American company which has the concession to work the deposit is taking out 4,000 to 5,000 metric tons annually. A small quantity of guano is picked up on the island but the quantity is insignificant.

As of possible interest it may be added that an English company started to work a deposit of phosphate of alumina in the small island of Redonda, near the island of Montserrat, British West Indies, in 1907. The better grades average 35 to 36 per cent phosphoric acid.

GERMAN-AMERICAN TRADE ADVANCE.

[From Vice Consul General E. H. L. Mummehoff, Hamburg.]

With a gain of \$1,721,980 over the declared exports during the first three months of 1911 and of \$1,207,973 over those of the corresponding quarter of 1910, the shipments to the United States and its insular possessions invoiced through the consulate general at Hamburg and the agencies at Kiel and Lubeck amounted to \$8,795,435 for the first quarter of 1912, as is shown by the following tabulation:

Exported—	1910	1911	1912
From Hamburg:			
United States.....	\$7,068,564	\$6,534,399	\$8,186,525
Philippine Islands.....	335,122	375,684	383,390
Porto Rico.....	127,665	121,285	122,615
Hawaiian Islands.....		459	1,449
From Kiel.....	6,562	1,004	3,352
From Lubeck.....	59,549	40,624	98,094
Total.....	7,587,462	7,073,455	8,795,435

There were no exports from the agencies at Kiel and Lubeck to the American insular possessions during the first quarter of the years mentioned.

OIL FUEL FOR LOCOMOTIVES.

[From Consul J. N. McCunn, Glasgow, Scotland.]

A recent issue of the Glasgow Herald contained the following mention of the installation of the Holden liquid-fuel apparatus on a Scottish railway:

An interesting experiment in the use of oil fuel for locomotives is being made by the Caledonian Railway Co. At the locomotive works in Glasgow an engine has been fitted up with oil-burning apparatus. The oil is stored in a cylindrical tank placed on the tender in a part of the space usually occupied by coal. The oil flows from the tank to the engine injectors, which force it into the firebox at two points about 18 inches apart, where a current of steam from the boiler causes it to assume the form of fine spray spreading itself through the firebox. By means of a thin layer of wood or coal fire covering the firebars this spray is ignited, and so generates steam for the motive power as well as for the injecting and spraying. The extent of the flame is regulated by a valve on each of the injectors. The firebox, in addition to the customary firebrick arch, is equipped with a firebrick wall to protect the copper front plate from the effects of the great heat produced by the oil fuel. The special fittings are such as to permit of the engine using oil or coal, as may be found desirable.

On a trial nonstop run from Glasgow to Stirling and return the engine consumed $1\frac{1}{2}$ gallons of crude oil per mile; drawing a full train it is estimated that the fuel consumption will be 3 gallons per mile.

FOREIGN TARIFFS.**AUSTRALIA.**

[From Commercial Intelligence, London, Mar. 20, 1912.]

Proposed Reciprocity With Canada.

In the reciprocity negotiations between Canada and Australia the Dominion Minister of Trade and Commerce intends to ask for a reduction of the Australian tariff on the following articles: Agricultural implements, ammunition, boots and shoes, metal manufactures, textiles and clothing, vehicles, bicycles, and motors. To facilitate negotiations the Canadian Minister of Trade and Commerce has decided to go to Australia.

Discussing Canada's contemplated demands the Australian Minister for Trade and Customs said in an interview:

In several of the articles mentioned (in the cablegram) no preference is now granted to Great Britain. Agricultural machinery is one of these. Some of the items are free and others are at a fixed rate of duty. In such a case as that of boots and shoes the Government, though it would be quite prepared to consider any proposal that might be submitted, could nevertheless not consent to accord any preference that would have a prejudicial effect on the industry in Australia. One item on which the Government would be disposed to negotiate would be printing paper. On that there was no preference at present. The matter was worth consideration and he would be prepared to give it attention with a view to seeing whether some form of acceptable arrangement with the Dominion was not practicable. In mutton and lamb and butter New Zealand secures from Canada a preference which substantially assists this trade. In mutton and lamb the preference operates to the extent of $\frac{1}{4}$ d. (about 1 cent) per pound against Australia.

[From Australian customs circulars.]

Trade Description of Boots and Shoes.

The following decision has been rendered by the Department of Trade and Customs of the Commonwealth of Australia under the trade descriptions act, 1905 (see Tariff Series 17B):

In the case of boots and shoes with heels composed of pulp, except for a thin outer strip of leather, the trade description must include a statement to that effect, e. g., "Pulp and leather heel."

Apple Wrapping Paper.

Since paper for wrapping apples was put on the free list by the tariff amendments which went into effect in December, 1911 (see Tariff Series 17D), provisions for the payment of drawback on such paper, effective under the tariff before the amendment, are canceled.

Parts of Machines.

Parts of any article, machine, or appliance shall, although specifically or generically provided for in the tariff as parts, if imported with any such article, machine, or appliance in a complete or substantially complete state, be dutiable under the tariff number applicable to such article, machine, or appliance. Articles, machines, and appliances shipped in an unassembled condition, ready, or practically ready for assembling, shall be treated as though actually assembled. (Order of the Department of Trade and Customs, Feb. 23, 1912.)

Weighing of Tobacco.

With regard to unstemmed leaf tobacco, the tare of about 10 per cent of any shipment is to be ascertained, and an average tare fixed for the remainder; or, at the discretion of the collector, the invoice weights may be accepted for bonding purposes, but in such cases the

correct net weight of each package must be ascertained by actual weighing at the time of removal from the customs warehouse to the factory. (Order of the Department of Trade and Customs, Feb. 23, 1912.)

BELGIUM.

Specific Rates of Duty.

The following specific rates of duty went into effect in Belgium March 1, 1912, in place of the ad valorem rate of 15 per cent formerly applicable to oilcloth and linoleum of all kinds:

[Kilo = 2.2046 pounds. Franc = \$0.193.]

Tariff No.	Articles.	Duty.
Ex. 64	Oilcloth of all kinds:	
	Linoleum—	
	For floors—	
	Single color..... per 100 kilos..	10
	With printed designs..... do....	12
	With inlaid designs..... do....	13
	For walls..... do....	18
	" Pégamoid " and similar products..... do....	75
	Oilcloth—	
	For wrapping..... do....	18
	For floors—	
	Single color..... do....	10
	With printed designs..... do....	12
	For walls..... do....	90
	Not specially mentioned..... do....	35

BRAZIL.

[From Consul General Julius Lay, Rio de Janeiro, February, 1912.]

Proposed Change in New Consular Regulations.

The Minister of the Treasury of Brazil, in deference to a request of the Commercial Association of Rio Janeiro, consented to delay the putting into force of the new consular regulations until the next session of Congress. There has been some dissatisfaction expressed with the new requirements for consular invoices, and it is reported that the matter will again come before Congress. [See Daily Consular and Trade Reports, Mar. 2, 1912.]

BRITISH GUIANA.

Withdrawal of Export Duty on Balata.

According to a Reuter dispatch published in the newspapers in Great Britain, the export duty on balata gum in British Guiana has been abolished.

COLOMBIA.

Penalties for Fraudulent Invoices.

American Minister James T. DuBois, Bogota, has transmitted a copy of a resolution of the Treasury Department of Colombia, which was published the latter part of 1911. The document contains the following provision relating to inaccuracies in invoices:

If the importer, in view of the discovery of fraud, should abandon merchandise declared for duty at a lower rate than that rightly

applicable to it according to the customs tariff, the amount of the duty is to be collected by the sale of the goods at auction, and if the amount of the duty is not realized from such sale, execution for the amount remaining due shall be made against the owner of the goods.

[From Consul Isaac A. Manning, Barranquilla.]

The attention of shippers should be called to the necessity for extreme care in the filling out of manifests and declarations of merchandise intended for the Republic of Colombia. When merchandise imported into Colombia has been wrongfully manifested and declared, in order to evade the payment of the customs duty rightly due, such merchandise shall not be abandoned in the customhouse by the importer. The importer is held liable for the payment of the duty on such merchandise at the rate rightly applicable to it, and is further liable to a fine. Under this ruling that prohibits the abandonment of merchandise falsely declared, a number of shippers have recently been required to pay very heavy fines; under the customs rulings formerly in force, the merchandise would simply have been abandoned in the customhouse.

Tariff Classifications.

Diamond chips for cutting glass have been placed under class 6 of the customs tariff, dutiable, including surtaxes, at about 17 cents per kilo (kilo = 2.2046 pounds).

Gasoline for all purposes has been placed in the second class of the customs tariff, dutiable at 1 cent per kilo, gross weight, and has been exempted from surtaxes.

GERMANY.

Customs Treatment of American Catalogues.

Referring to a previous report (published in Daily Consular and Trade Reports Mar. 2, 1912) to the effect that since December 1, 1911, American trade catalogues had been subject to an import duty of 30 marks per 100 kilos, under tariff No. 670 of the German tariff, Consul General Robert P. Skinner, Hamburg, has reported that the ruling by which such catalogues were made subject to duty has apparently since been revoked. Complaint was made when duty was charged on American trade catalogues imported by a well known firm, and it is said that the amount of the duty paid in that instance was afterwards refunded, indicating that the catalogues are now regarded by the authorities as subject to free admission.

ITALY.

[From Consul General James A. Smith, Genoa.]

Duty on Barium Hydroxide.

The Italian customs duty on barium hydroxide was increased by decree of March 16, 1912, from 2 lire per 100 kilos (\$0.175 per 100 pounds) as follows: Barium hydroxide, crystallized, 4.50 lire per 100 kilos (\$0.394 per 100 pounds); barium hydroxide, with the water of crystallization extracted, 8 lire per 100 kilos (\$0.70 per 100 pounds).

NETHERLANDS.

[Reported by American Minister Lloyd Bryce, The Hague.]

Changes in Import Duties.

By a royal order dated February 23, 1912, the rate of import duty on spirit of nitrous ether is changed from 2.05 florins to 2.35 florins per kilo (from 37 to 43 cents per pound), and the import duty on similar substances prepared from alcohol or with alcohol, not specially provided for in the tariff of the Netherlands, is changed from 2.25 florins to 2.35 florins per kilo (from 41 to 43 cents per pound).

NORWAY.

[From Board of Trade Journal, Mar. 7, 1912.]

Exemption from Duty for Wireless Apparatus.

According to official information received by the British Government, a Norwegian order in council was issued on February 9, 1912, providing that no customs duty shall be collected on apparatus for wireless telegraphy imported into Norway.

PORTUGAL.

[From Mitteilungen des Handelsvertragsvereins, Mar. 20, 1912.]

Proposed Free Port at Lisbon.

The Senate of Portugal has approved a bill for the creation of a free port in Lisbon; at the time of this report the bill had not been voted on by the Chamber of Deputies. It is proposed to turn over the charge of establishing and operating a free port to a private company for a period of not more than 60 years. This company is not to be subsidized by the Government, and the only advantages which will be conceded to it by the Government consist in the use of the premises for the period stated. At the expiration of the period decided upon the Government is to take over the control of the free port, on payment of the value of the buildings and other improvements that the company may make during the period of its occupation.

COBALT'S SILVER SHIPMENTS.

[From Consular Agent E. C. Wakefield, North Bay, Ontario, Canada.]

Cobalt's shipments of silver bullion for the quarter ended March 31, 1912, reached 1,616,333 ounces, of a total value of \$955,488. The tremendous increase that this indicates can be shown by a comparison with the figures for the two preceding years. In 1910, bullion shipments for the whole year aggregated 945,703 ounces, valued at \$501,815, an amount less than the shipments for the first two months of the present year. In 1911, the bullion shipments from Cobalt totaled 3,772,920 ounces, valued at \$2,120,428. This means that the average monthly shipment during 1911 was 314,410 ounces, worth \$176,702. Statistics for the first quarter of 1912 show a large gain on these figures, the average monthly shipment for this year amounting to 538,778 ounces, worth \$318,496.

MALAYSIAN BUSINESS NOTES.

[From Vice Consul General D. Milton Figart, Singapore.]

New Hospital—Reduced Royalty on Tin.

A committee of the King Edward VII memorial fund at Penang has invited architects to submit competitive designs for a maternity and children's hospital, offering premiums of \$240 and \$57 gold. The designs are to be submitted before April 30. This will involve demands for various classes of builders' hardware, hospital equipment, etc. Full particulars can be obtained from J. Kirk, Esq., honorary general secretary, Penang, Straits Settlements.

The Federated Malay States Government is prepared to consider applications for a reduction in particular cases of the tin won from lodes or from low-grade alluvial workings or from mines where ore is refractory to win or treat.

Marine Motor Service.

The Malacca Marine Motor Service & Lighterage Co. (Ltd.), capital \$34,000, proposes to establish a regular safe and rapid service of modern motor launches within the harbor limits of Malacca and neighboring islands.

On March 8, 1912, the first vessel of the Singapore Marine Motor Service was launched, and it was expected to have six motor launches running in the harbor within a few weeks. The launches are 36½ by 8½ by 3½ molded depth and draw loaded, main draft, 18 inches. They are fitted with the well-known Kelvin motors, which develop 14 to 16 horsepower and the boats attain a speed of 6½ knots. They have been built to local government marine requirements and have fore and aft buoyancy chambers, being practically unsinkable. The two large ones have 30 to 40 horsepower engines and one carries lavatory and fittings.

European Settlers—Japanese Coal.

The recent census of the Federated Malay States points out that the extension of the rubber planting industry has increased the European male population returned as engaged in agriculture from 108 in 1901 to 882 in 1911.

A Reuter telegram in the local press states that on account of the English coal strike arrangements have been made with the Mitsui Bussan Kaisha to send 26 cargoes of coal to Singapore. This has given rise to some comment as to whether the Government wharves are in a position to handle this coal in view of the disapproval of the Government of the scheme to allow colliers to discharge their cargoes into coal hulks which could be anchored in the roads until a vacancy occurred at the wharves.

Local Agencies of American Houses.

A great many requests for trade information come from American manufacturers who have local connections. The manufacturers invariably fail to advise the consulate general of this, and in many cases lack of such information has contributed more or less to an unsatisfactory reply. It is suggested that when firms write for information regarding the market for products in this district, some statement should be made regarding their connections and past business transacted.

Rubber Machinery.

In connection with the recent suggestions from this consulate pointing out the market for rubber machinery of American manufacture, the following note from Grenier's Rubber News will be of interest:

We learn from home that there is a tendency for rubber machinery of all kinds to become larger and heavier, and as an illustration of this we have the example of a firm in Leeds which has just built a large hydraulic vulcanizing press—one of the heaviest that has been made in Britain for use in rubber work. It has been specially designed to use excessive water pressure, and to give an enormous pressure per square inch on the surface of the material. The whole machine is extremely solid and suitable for extraordinarily heavy work and the steam pressure that can be admitted to the platens is up to 150 pounds per square inch.

Improvements at Port Swettenham.

Port Swettenham is the shipping port of Kuala Lumpur, capital of the Federated Malay States, which is rapidly becoming an industrial center of the Malay Peninsula, being easily accessible to both the tin and rubber industries.

A deputation from the Selangor Chamber of Commerce recently called on the Government, pointing out with regard to Port Swettenham the shortage of lighters; insufficient crews; inefficiency of labor on shore; control of the coolies; necessity for an experienced European officer to be in charge of the port; shortage of railway trucks; the system of transfer from railway to ship; the construction of the ocean-going steamers' wharf; anchoring buoys; and a bigger crane.

During the discussion a plan of the proposed additions to the wharf was shown to the deputation, from which it appears that it is proposed that a new wharf of about 1,160 feet in length will be constructed to extend from the present pontoon wharf in the direction of Sungei Aur. The cost of the work is estimated at \$1,130,000 gold, and some three years will probably expire before the work can be completed. In addition to this, a semipermanent wharf for the discharge of lighters is about to be erected at the entrance to the Sungei Aur, and the railway line will be extended up to this wharf and freight sheds will be provided. The general manager for railways stated that it was hoped that this wharf would be completed in about four months.

Concerning rolling stock, the chief secretary mentioned that a large number of trucks from England are arriving. It was proposed to order at once some 600 trucks more, which it is anticipated will be sufficient for some time. A heavy crane with a capacity of 20 to 30 tons will also be considered.

Developing the Federated Malay States.

The Malay States Government Information Office, London, states that for further developing and opening the country, the Federated Malay States Government is wisely pushing the extension of their magnificent railway system. About \$3,000,000 (United States currency) expenditure for new construction work is authorized this year, the most important being the Pahang-Kelantan line, which will eventually join the Siamese system. The department will also begin extending the line from Province Wellesley into Kedah on the north, deviation of the main line from Kuala Lumpur to Salak south, and completing the Kuala-Selangor line, while \$400,000 will be spent on a branch line opening up the Rawang coal field, which promises a valuable new industry. Seven new locomotives and a large addition to the rolling stock, both passenger and goods, will be made during the year.

DIAMOND MINE PROFITS IN SOUTH AFRICA.*[From Consul W. J. Yerby, Sierra Leone.]***The German Southwest African Diamond Fields.**

The Government authorities of German Southwest Africa estimate that the revenue from the diamond industry will amount to \$2,432,500 in the budget year of 1912. This amount is mainly composed of the export duties and to a smaller extent the mine taxes. According to the Berliner Tageblatt, the estimates for this year are of special interest, as it had been reckoned that the export duties would be reduced or converted, but the budget again provides for the imposition of export duties of 33½ per cent, which may be assumed as proof that a decisive alteration in the duties can not be counted on for the time being. Having regard to the fact that a number of diamond fields will be worked out this year, and the northern fields can not certainly be expected to furnish much production, the Government authorities estimate the output of diamonds at 850,000 carats for this year, as compared with an estimate of 900,000 carats for 1911.

Profits of One German Concern.

The Financial News publishes the following from its Berlin correspondent:

The balance sheet of the German Colonial Co. for Southwest Africa at Berlin for the half year April 1 to September 30, 1911, was presented at a board meeting on February 28, and the administration declared that according to estimates a dividend of about 35 per cent might be expected for the year 1911-12. This is another reduction of the dividends of the company, which paid 64 per cent for the year 1909-10 and 50 per cent for the year 1910-11, due to the unfavorable economic condition of the colony and the decrease of the output of diamonds.

*[From the South African Mining Journal, forwarded by Consul Edwin N. Gunsaulus, Johannesburg.]***Profits of a Transvaal Concern.**

A profit of \$2,585,454 is disclosed by the report of the Premier Diamond Co. for the year ended October 31, 1911, in addition to \$1,515,165 worth of diamonds on hand and unrealized special accounts for \$65,191. Practically the whole of the balance (\$1,450,973) was realized in November and December at an advance in stock prices. During the company's year 250 per cent (\$486,650) was paid as dividends on the preferred shares and 200 per cent (\$389,320) on the deferred shares. A further dividend of 300 per cent later declared payable on the deferred shares made a total for the calendar year of 500 per cent, against the previous record of 400 per cent.

The earth washed during the year, 8,325,000 loads, was a million loads less than that handled in the preceding year, owing to the scarcity of native labor, but the value per load increased enough to make the aggregate profit nearly equal to that of the previous year. The recovery per load was 83½ cents, against 77½ cents in 1909-10, but the weight recovered per load fell from 0.230 to 0.213 carat per load. The increased value per load was therefore due to the increase in the average value of the diamonds.

The average number of loads hauled per 24-hour day was 29,055; the cost mined and washed, 50½ cents, and the average cost per carat won, \$2.37½. The yield of diamonds was 1,774,206 carats, a decrease of 371,627 carats from the previous year. Recruiting costs came to \$16.30 per head for 12,169 natives forwarded by recruiting agents in 1911, against \$8.47 per head for 13,017 natives in 1910. Voluntary natives numbered 2,856. The natives received 65½ cents each per day and found themselves. The number of white employees averaged 729, receiving \$1,017,696 in wages.

[The diamond trade for 1911 was also reviewed in Daily Consular and Trade Reports for Feb. 21, 1912.]

Consul Stuart K. Lupton, of Karachi, learns that 1,000 freight cars and 88 engines are to be purchased this year for the Northwestern State Railway of India. The purchases are made through the Government agency in London, but the orders are all for British-made goods.

CANADIAN LAKE SHIPPING.

[From Consul A. G. Seyfert, Owen Sound, Ontario.]

Only one of the five Canadian Pacific steamers which formerly sailed from Owen Sound to Fort William will in the future call at Owen Sound. The eastern terminal of this line has been changed to Port McNicholl, and the fleet will sail from that port at the opening of navigation.

The great flood from the melting snow on April 6 did at least \$1,000,-000 damage in the locality of Georgian Bay. An enormous amount of dredging will be necessary to remove the rocks and soil washed into the harbor. Bridges and dams that withstood floods for many years were swept away.

The Dominion Government is erecting wireless stations at Midland, Tobermory, Sault Ste. Marie, and Fort William. All will be in operation when navigation opens this season. The Canadian Pacific fleet of steamers, in winter quarters in Owen Sound Harbor, is fitted out with wireless for communication with the Government stations.

The Northern Navigation Co., headquarters Collingwood, has ordered a new \$750,000 passenger and freight steamer from the Western Shipbuilding Co. of Port Arthur for the 1913 season. The new steamer will be the largest and most costly ever built in Canada, and the finest vessel on the Great Lakes. The boat is to be 452 feet in length, and 55 feet beam, with accommodations for 500 first-class passengers.

As a result of congestion of business and labor troubles in England, an order for a full-sized \$140,000 canal steamer has been placed with the Collingwood Shipbuilding Co. by the Keystone Transportation Co., at Montreal; and if the company succeeds in turning it out on contract time, September, 1912, this will constitute a record for shipbuilding in Canada. The new vessel will be 258 feet long, with 42.6 feet beam, 20 feet depth, 800-horsepower engines, and a speed of about 10 miles an hour. Its capacity will be about 82,000 bushels of wheat.

HOLIDAY COURSE IN SPANISH LITERATURE AND ART.

The Spanish minister at Washington has called attention to a "holiday course for foreigners" which has recently been organized by the Department of Public Instruction with the object of affording to foreigners an opportunity to acquaint themselves with the fundamental ideas of Spanish literature and the beauties of the court museums and the monuments of art in Toledo, the Escorial, Avila, and Segovia.

An explanatory pamphlet issued by the board for the promotion of studies and scientific research states: "The primary aim of the course, which is to be held in Madrid from June 15 to July 24 of the present year, is to offer to foreigners interested in the study of Spain and its language, and especially to professors and teachers, the opportunity of attending lectures and of being introduced to some of the leading works and masterpieces of Spanish literature. Facilities will also be given for becoming acquainted with the country through lectures, excursions, and visits to museums. Prospective students should note that some knowledge of the language is expected." This pamphlet, which gives additional information, will be loaned upon request by the Bureau of Manufactures.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8678. Representation in Argentina.**—An American consular officer in Argentina reports that a resident of his district has just left for the United States with a view to conferring with manufacturers and others who might desire to establish sales connections in that country. He states that he has had long experience in Argentina and wishes to hear from all firms that are interested in this proposition. His itinerary will include all the leading cities of the United States, which will give interested persons an opportunity to interview him personally.
- No. 8679. Dry dock.**—The American consulate general at Ottawa, Canada, reports that the Dominion Government is calling for tenders for the construction of a dry dock in the vicinity of Quebec. Tenders will be received until July 2, 1912. The construction of this dock is to be provided for under an act, copy of which was forwarded by the consul general and can be obtained upon application to the Bureau of Manufactures.
- No. 8680. Wool.**—A business firm in the Levant informs an American consulate that it desires to be put in communication with American buyers of wool. No commission houses desired. This firm will furnish samples on request by responsible firms with satisfactory references. Correspondence may be in English, and a list of references is furnished by the inquirer.
- No. 8681. Copper sheets and cotton goods.**—An American consul in the Near East reports that a firm in his district desires to make connections with American concerns for the representation of the following: Round copper sheets; also cotton goods, consisting of T cloths, cabots, sheetings, prints, etc., and remnants. Samples should be forwarded with prices and discounts. Correspondence with this firm, which furnishes references, may be in English.
- No. 8682. Axle oil for coaching stock.**—The American consulate at Karachi, India, has forwarded a notice calling for tenders for the supply of 540 tons of high-grade axle oil for lubricating axles of coaching stock for a period of 12 months from August 1, 1912. Tenders must reach the manager, Northwestern Railway, Naulakha, by June 11, 1912. Samples (not less than 1 imperial gallon of the oils tendered for) should be dispatched to the chief storekeeper, Northwestern Railway, Naulakha, Lahore, by the same date. Copy of the notice, containing specifications of the oils and further particulars, will be sent to interested persons by the Bureau of Manufactures.
- No. 8683. Coal.**—The Bureau of Manufactures is in receipt of a communication from a business organization in the Near East stating that the present seems a favorable time for the introduction of American coal. It is believed that a good business can be done in this line if satisfactory arrangements can be made with American shippers. Correspondence is desired by this organization as soon as possible.
- No. 8684. National park for Argentina.**—The American consulate general at Buenos Aires, Argentina, has forwarded copies of La Nacion, containing the project of the National Park of the Iguazu, also a plan of the same, which the director general of municipal parks, Mr. Carlo Thayer, presented to the Minister of Agriculture. The consul general reports that an effort will be made to secure blue prints of the proposed undertaking, and these will be loaned by the Bureau of Manufactures when received.
- No. 8685. Tenders for public requirements.**—A dispatch has been received from an American consular officer stating that the present is a peculiarly opportune time for American activity in the country in which he is located. Further particulars can be obtained by addressing the Bureau of Manufactures.
- No. 8686. Canned fruits and vegetables.**—An American consul in the Near East reports that a business man in his district has requested c. i. f. quotations on canned fruits and vegetables. Exporters should state size and weight of cans. Payments will be made on receipt of goods.

- No. 8687. Automobiles.**—The commercial attaché of a European embassy in Washington informs the Bureau of Manufactures that he has a request from his country for strongly built automobiles of small horsepower to sell retail at destination for \$800 to \$1,000. The firm making inquiry desires to make connections with an American manufacturer not represented in the country in question.
- No. 8688. Cabots and sole leather.**—A business firm in the Levant informs an American consulate that it desires to receive c. i. f. quotations on three qualities of cabots, as follows: First quality, 36 inches wide, 40 yards to the piece; second quality, 27 inches wide, 33, 80, 85, and 91 yards to the piece; third quality, 36 inches wide, 40 yards to the piece. Quotations for heavy and medium-weight sole leather are also requested. Applicant prefers that accounts be payable on arrival of goods.
- No. 8689. Beer bottles.**—A foreign business man requests an American consulate to obtain quotations on plain beer bottles, with and without caps, in two sizes, preferably liters and half liters. Manufacturers of combination tin and cork caps, also hand-capping or corking machines, are asked to mail catalogues, prices, and terms f. o. b. New York.
- No. 8690. Tallow and resin.**—A general export and import agent in a Mediterranean country, who states that he is in a position to furnish first-class references, informs an American consulate that he desires to purchase American tallow and resin, and he would like to receive offers from American producers or exporters of these articles. Correspondence may be in English.
- No. 8691. Freight sheds.**—The Belgian States Railways invite tenders for erecting a goods shed at Midi Station at an estimated cost of (section 1) \$180,000 and (section 2) \$75,000. Specification No. 122 obtainable from the Bureau des Renseignements, 15 Rue des Augustins, Brussels, Belgium.
- No. 8692. Ice-making machine.**—The Coast Guards Administration, Alexandria, Egypt, will receive tenders for the installation of an ice-making machine for steamship *Noor-el-Bahr*. Tenders will be received through local agents only.
- No. 8693. Telephone material.**—Tenders will be received by the Deputy Postmaster General, Melbourne, Australia, for the following material: (1) Until May 14 for 1,075 common battery telephones, 100 telephone switches, and 1,000 condensers (schedule No. 665). (2) Until May 21 for 30 miles of paper-insulated lead-covered cable (schedule No. 671), 24 miles of paper-insulated lead-covered cable (schedule No. 672), and 699 nonsolarized relays (schedule No. 680). (3) Until July 23 for lamp-signaling trunk-line switchboard of nine sections, and associated desk equipment (schedule No. 637). Local representation is necessary. For copies of the specifications and forms of tender, application should be made to the High Commissioner for the Commonwealth of Australia, 72 Victoria Street, London, S. W., England.
- No. 8694. Permanent road materials.**—Tenders will be opened on May 14 at the offices of the Chemin de Fer l'Etat Roumain, Bucharest, for the construction of permanent way for the line to be built from Zimnicea to Zimnicea Harbor. The upset price is put at about \$195,000. Although this contract will probably be awarded to a Roumanian firm, the carrying out of the work may involve the purchase of materials out of the country.
- No. 8695. Tramways.**—Tenders are invited by the Public Works Department, Constantinople, Turkey, for the construction of electric tramways in Stambul. Tenders will be received through local agents only. Specifications, particulars, conditions of contract, etc., may be obtained from the Ministère des Travaux Publics for \$2.19.
- No. 8696. Dredging in Canada.**—The American consulate general, Ottawa, Canada, reports that tenders will be received until May 6, 1912, for dredging required at the following places: Vernon River, Prince Edward Island; Cheticamp, Margaree Harbor, Sydney Harbor, D'Ecousse, Digby, Musquodoboit, Mill Cove, Nova Scotia; and Fredericton, St. Andrews, and St. Stephen, New Brunswick. Tenders must be made on the forms supplied. Combined specifications and forms of tender can be obtained on application to Secretary, Department of Public Works, Ottawa, Canada. Contractors must be ready to begin work within 30 days after the date of acceptance of tender.

HONGKONG UNIVERSITY OPENED.

[From Consul General George E. Anderson; see also Daily Consular and Trade Reports for Jan. 14, 1911.]

Hongkong University, the institution founded and endowed by a number of British, Parsec, and Chinese gentlemen for the education of Chinese young men, and organized under the patronage and control of the government of Hongkong, was formally opened on March 11 by Sir Frederick Lugard, retiring governor of the colony, with elaborate ceremonies in which the Chinese residents of Hongkong took a prominent part.

The university starts with a complete building equipment and an endowment of \$1,429,099 local currency. The building was constructed by the late Sir Hormusjee Mody, a Parsee merchant of Hongkong, as his contribution, at an expense of \$180,000 local currency. The endowment includes subscriptions from Chinese sources, mostly from three Chinese residents of the Straits Settlements, amounting to \$751,179; British and other subscriptions in the East, \$144,650; British subscriptions in Great Britain, \$466,664; and interest and other items, \$66,706. The faculty is substantially British in all lines but Chinese language and kindred subjects.

The assured income of the university from the beginning will be about \$100,000 local currency, or something like \$45,000 gold, per annum, including \$14,000 local currency per annum appropriated by the legislative council of Hongkong as government support.

VENEZUELAN FOREIGN TRADE.

[From Consul Thomas W. Voetter, La Guaira.]

Official publications show the foreign trade of Venezuela for the six months ended December 31, 1911, to have aggregated \$21,176,905, made up of imports \$9,654,926 and exports \$11,521,979, and distributed by countries as follows:

Countries.	Imports.	Exports.	Countries.	Imports.	Exports.
United States.....	\$3,044,402	\$3,823,102	Italy.....	\$304,424	\$89,473
Austria.....	1,328	130,457	Netherlands.....	608,698	125,669
Belgium.....	55,579	30,639	Porto Rico.....		2,946
Colombia.....		42,411	Spain.....	361,460	554,561
Cuba.....	816	37,515	Trinidad (B. W. I.).....	62,285	329,268
Curacao.....	4,821	417,003	United Kingdom.....	2,867,912	602,537
France.....	689,425	2,773,882	All other.....	450	608
French Guiana.....		41,726			
Germany.....	1,593,326	2,450,172	Total.....	9,654,926	11,521,979

Included in the above figures are the following quantities of coined money: Imports—United States, \$1,013,572; France, gold, \$39,082, silver, \$106,150; Trinidad, \$14,957. Exports—United States, \$1,737; Germany, \$4,369; France, gold, \$4,026, silver, \$57,900; Trinidad, \$2,950. The transactions with France were on account of new coinage, both gold and silver, being made in that country for Venezuela, and the shipment of worn currency there for reminting.

March exports of domestic merchandise totaled \$202,413,533, against \$158,670,456 in 1911 and \$140,380,053 in 1910.

DAILY CONSULAR AND TRADE REPORTS

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15th Year

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METAL BUILDING MATERIALS ABROAD.

[From Consul E. A. Wakefield, Port Elizabeth, South Africa.]

For many years there has been a brisk demand for sheet metal in South Africa, and nearly all for building purposes. In the large towns galvanized iron is used for fencing small inclosures, for out-buildings, warehouses, roofs, water tanks, and, in some instances, dwelling houses. Up country, it is quite commonly used for dwellings. Steel ceilings and side walls are becoming more popular, especially in inland towns. On the coast the moisture-laden winds are apt to cause rust unless the metal be frequently painted.

There are various kinds of roofings in general use, such as pottery tile, galvanized iron, slate, rubber roofing, and tar and gravel. So far as known, there are no tin roofs. Pottery tile roofing is purchased from France and England, French imports for this district exceeding those from Great Britain. Exact figures of importations are not obtainable, as they are included with other earthen and china ware.

French tiles sell here at \$7.30 per 100 square feet (120 tiles), while English tiles sell for \$10.95 per 100 square feet (70 tiles). However, French tiles require more timber for roof construction because of smaller size, and each tile must also be fastened with wire. English tiles require little or no fastening. Most of the best buildings are tile roofed.

Galvanized Iron—Market for American Wares.

Galvanized iron, or, more properly, galvanized steel, is imported from both England and the United States, the former supplying about 80 per cent of the imports. Probably 60 per cent of the English galvanized steel is rolled from sheet steel produced in America. During 1910 galvanized steel to the amount of 20,954 hundredweight, valued at \$75,129, was imported into this district.

While most of the steel ceilings come from England, the American product has a fair market here with probably slightly increasing proportionate sales. There are no manufacturers of steel ceilings in this consular district. The class of product imported locally sells at 6 to 9 cents per square foot.

Quality and price being comparatively favorable, there is no obstacle in the way of further development of American trade in these lines. A large school is soon to be erected in Port Elizabeth at a cost of nearly \$200,000, and some of these materials will be used. The duty on tiles is 15 per cent ad valorem; on steel ceilings, 15 per cent; on galvanized steel, 3 per cent; and on tin plate or sheets, 3 per cent; and in each instance there is a preferential rebate of 3 per cent ad valorem in favor of English products.

[From Consul Stuart K. Lupton, Karachi, India.]

Strong Competition—Customs Duties.

Competition in the sale of sheet-metal goods is very strong. India is largely supplied by Great Britain, the majority of import houses here being conducted by British subjects. Germany seems to be increasing its trade by a close application of common-sense principles. German traveling men return again and again to the district, although they may lose money on the first two or three trips.

Customs duties are levied on tin and iron roofing, steel ceilings, and side walls as follows: Iron plate and sheets, other than corrugated, and strips, galvanized, tinned, planished, or lead-coated, 1 per cent ad valorem; iron sheets, corrugated, galvanized, or black, 1 per cent on fixed valuation of 180 rupees, equal to \$58.40 per ton; steel plates, sheets, other than corrugated, if galvanized, tinned, lead-coated, or planished, 1 per cent ad valorem; steel sheets, corrugated, galvanized, or black, 1 per cent on fixed valuation of 180 rupees, equal to \$58.40 per ton.

No special mention is made of stamped ceiling and side walls, except under the heading "Other sorts," at a duty of 1 per cent ad valorem.

Imports by Countries.

By principal countries, India's imports of sheets and plates during the last three fiscal years were:

Plates and sheets.	1908-9	1909-10	1910-11
GALVANIZED IRON.			
Great Britain.....	\$79,664	\$76,537	\$90,009
Belgium.....	5,219	5,412	133
United States.....	628	64	.....
TINNED.			
Great Britain.....	8,622	4,529	7,281
Other countries.....	.....	37	.....
STEEL.			
Great Britain.....	335,256	283,411	353,209
Belgium.....	223,324	227,364	125,445
Germany.....	82,949	66,975	27,206

The United States has not figured in this last-mentioned item since 1906, when credited with \$558. Although the imports of steel plates from Belgium appear from the statistics to exceed those from Germany, I am informed that this is not the case, the greater portion thereof being merely cargo placed on ships at Belgian ports. A large portion of the corrugated steel sheets is of very heavy grade, about three times the thickness of the ordinary 27-gauge. This is worked up into tubes for culverts, telegraph poles, etc.

Building Methods in Vogue.

Although I have been in Karachi three years, I have not seen stamped metal ceiling or siding here. The majority, in fact almost all, of the houses in Karachi are built of local products and in the cheapest manner possible. A very poor grade of sandstone is used for the walls, and cases are known where houses less than 30 years old have had to be torn down on account of the deterioration of the lower tiers of stone. Ceilings are of the very cheapest quality of matchwood, imported chiefly from Hungary. Roofs are covered almost without exception with tiles. A cheap native tile laid in mortar costs about \$1.95 per 100 square feet. This requires a continuous sheathing, and is also very heavy, about 12 pounds to the square foot. The best quality of tiling used is manufactured in Karachi and laid without mortar on continuous sheathing. This tile sells for \$1.20 per square yard, or about \$13.50 per 100 square feet.

Karachi is a place where people move a great deal. Almost all of the better classes among the European residents know that they will leave Karachi in two or three years, or have hopes of doing so. The result is that almost all dwellings are owned by a few landlords, who save as much money as possible in construction. Even the business houses are in the same condition. The well-to-do native is accustomed to this class of construction and does not seem to care for any change for his own use. Many small houses are being put up at present, but all are constructed in the manner spoken of. There has been more or less talk for the past four years of a new customhouse and a municipal building, but the discussions have not yet reached a point where sites are being considered.

[From Consul Edward I. Nathan, Mersine, Turkey.]

Iron and Steel Products in Asia Minor.

The imports of iron and steel products at Mersine are deserving of more attention by American manufacturers who, with a single exception, have neglected this market. Much construction work has been going on here in the past two years, and steel joists, corrugated sheet iron, wire nails, and iron pipe have been imported in greater quantities than before. The principal imports of iron and steel in 1911 included about 400 tons of steel joists and 800 tons of mild steel from Belgium; 150 tons of what is known as Milan steel, which is packed in cases and comes from Austria; also about 600 tons of malleable iron from Sweden, which is used largely for the manufacture of native tools and implements.

No attempt has been made by Americans to compete with any of these articles. Corrugated sheet iron for roofing is the principal import of this class from the United States. In 1911 the value of such imports was \$8,183, but the value of similar imports from Great Britain during the same period was \$28,588. A small quantity of iron pipe valued at \$637 was also imported from the United States, but the principal sources of supply for iron pipe were Great Britain and Germany. American wire nails formerly monopolized this market, and indeed the entire Levant, but lower-priced French and Belgian nails have taken their place. Large quantities of spades, without handles, and all kinds of tools are imported every year, but no American goods are seen. American nail pullers, files, and saws, as well as other articles for construction work, could be sold here.

There were also heavy imports of steel rails and all kinds of railroad material at Mersine during the past two years. These were all for the construction of the new sections of the Bagdad Railroad which is to traverse the plain of Adana. As this is a German concession the necessary material was imported direct from Germany and Belgium. Contracts for buildings in Mersine have been given by the municipality to a French company which will also doubtless import its material direct.

[From Consul Lester Maynard, Harbin, China.]

Metal Tiles Unknown in Harbin.

Metal Spanish tiles, metal shingles, and steel walls and ceilings have never been introduced into this market, and the local builders and architects, although admitting that they know practically nothing about them, are inclined to doubt the possibility of their introduction.

Approximately 650 tons of corrugated iron were imported into Harbin during 1911. The returns of the Imperial Chinese Maritime Customs show that 662 tons were imported through the custom-houses at Manchouli and Suifenhö during 1910, the value being declared at \$48,979 United States gold. Practically all of this corrugated iron comes from Great Britain, and the principal grades are Nos. 28 and 29, the former selling for about \$66 and the latter \$69 per ton. The duty on corrugated iron is 0.275 haikwan tael (haikwan tael is at present 70.6 cents) per picul of 133½ pounds avoirdupois. The duty on tin in sheets is 1.725 haikwan taels per picul, and on tin slabs 1.50 taels.

The extremely cold winters of this district cause the suspension of all construction work, and as a consequence the short building season of about six months is very active. I believe if one of the local builders or architects could be induced to introduce metal ceilings and walls or metal shingles, a fair demand could be created.

[From Consul General A. Gaulin, Marseille, France.]

Roofing Materials and Metal Ceilings.

Tiles are practically the only roofing material employed in this district, rubber and metal roofing being used to a very limited extent. The annual output of the Marseille brick and tile factories averages over \$2,000,000 in value, and the quantity exported each year exceeds 165,000 metric tons.

The ordinary flat tiles are quoted at the present time (Feb. 12, 1912) at \$13.50 to \$15.45 per thousand, and round tiles \$9.65 to \$12.95, according to size. Flat tiles laid on roof cost 35 to 40 cents per square meter (10.764 square feet), round tiles \$1.15.

The sale of metal roofing here would be chiefly dependent upon price. It is feared, however, that metal roofs would prove too hot in this climate. Whatever is used of this product now is entirely of domestic manufacture.

[From Consul General Ernest L. Harris, Stockholm, Sweden.]

Introduction of American Goods.

Inasmuch as Swedish manufacturers are unable to supply all of the Kingdom's demand for metal roofing, there is a considerable sale here of foreign products of this nature. The market thus far has been supplied chiefly by Germany, Belgium, and Great Britain. Attempts to introduce these goods are also being made by American

manufacturers, and it would appear that their efforts are meeting with some success.

The price ordinarily obtained in Stockholm for black flat sheets is about \$10 for 440 pounds. These are sold in strips, the sizes of which are usually 1.2 by 0.6 meter (3.937 by 1.9685 feet). Galvanized flat sheets are quoted about 20 per cent higher. Formed roofing and siding does not seem to be in current use. Ornamental metal ceilings are not used so much as those made of gypsum and papier-mâché.

[From Consul Wilbert L. Bonney, San Luis Potosi, Mexico.]

Business Disturbed at Present.

In this market tin plate is purchased from England; cases containing 112 sheets of charcoal tin of good quality, each 14 by 20 inches, are laid down here for \$4.32 per case. I am informed that American exporters can not compete with this price.

Houses, business structures, and public buildings in this district are built with cemented roofs, and tin or corrugated iron are used only in industrial buildings and plantation works. The tin and corrugated iron usually come from England. There might be a better prospect for business in this line in the eastern part of the State, where American colonists in many cases put up frame buildings.

Building methods are conservative in this country, and at present conditions are such that no new work is being undertaken. When normal conditions are restored and building and remodeling resumed there should be a market for American metal goods, but they will require demonstration and pushing.

JAPANESE FUEL AND IRON OUTPUT.

[From Consul General Thomas Sammons, Yokohama.]

Statistics of the production of Japanese collieries during 1905-1910, inclusive, follow:

Articles.	1905	1906	1907	1908	1909	1910
	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>
Coal.....	11,542,397	12,980,103	13,803,969	14,825,363	15,048,113	15,681,324
Pig and cast iron.....	133,941	143,176	141,149	145,011	163,376	187,793
Iron and steel, "Kera" direct process.....	1,136	1,133	884	685	475	474
Wrought iron.....	1,308	1,381	1,064	93	284	19
Bessemer and open-hearth ingots and castings.....	54,096	69,096	88,479	92,323	100,245	167,886

The Eleventh Financial and Economic Annual, issued by the Japanese Department of Finance, shows that on December 31, 1909, there were 681 machine shops, 595 tool works, and 1,000 foundries and metalware establishments in operation throughout the Empire. These employed 13,688, 11,903, and 16,987 operatives, respectively, the women workers numbering 156 in the machine shops, 962 in the tool factories, and 1,863 in the foundries. The average wages of machinists and toolmakers are not given in the report, but founders received 27 cents per day in 1906, 31 cents in 1907, 33 cents in 1908, and 33½ cents in 1909. There were also 44 plants listed as "metal refineries," employing 1,196 operatives.

CHINESE PORK FOR EXPORT.**HANKOW.**

[From Consul General Roger S. Greene.]

Hankow is the center of the Chinese export trade in dressed hogs, the industry being entirely in the hands of the International Export Co. (Ltd.). All the foreign shipments, amounting in 1910 to 21,523 carcasses, go to Great Britain. The 1911 figures are not yet available, but the company handling the trade places the shipments at 19,903 carcasses.

There has been some misapprehension as to the food on which these hogs are fed. This is usually rice bran, refuse rice, and other grain from native breweries and distilleries, bean oil cake, and the hulls, etc., left from the manufacture of bean curd. While the scavenger pig also exists, it is apparently not the source of the ordinary meat supply for the foreign market. The conditions under which the animals are slaughtered and dressed are said to be satisfactory and the buildings of the local plant are modern and well kept.

The abnormal conditions now prevailing in China make any price information very unreliable, especially with the present erratic exchange rates. Pigs cost about \$20 Mexican per head here, in quantities. At the rate of \$0.434, as given by the United States Treasury Department on January 1, 1912, this would be \$8.68 gold, but at recent bank rates in China it would be over \$10 gold. This price is on the basis of 160 pounds gross weight, but most of the pigs weigh between 185 and 210 pounds. The net weight of the dressed pig is about 20 per cent less, but about \$1.30 gold can be obtained for the head and by-products. The net cost per pound would therefore appear to be about 5.8 cents gold per pound. The retail price is 6 to 6.5 cents gold per pound at the present exchange rate.

Report of an English Investigator.

In 1911 an official investigation of the entire industry here was made by Dr. Reginald Farrar, of the Local Government Board, London, who prepared an extensive report. A copy of the part dealing with the export of dressed hogs from China is forwarded herewith [and may be obtained from the Bureau of Manufactures]. From discussions of this report with local physicians, I have come to the conclusion that the favorable view taken by Dr. Farrar of the pork at present exported is justified. It appears that parasitic and tubercular infections of Chinese pork are comparatively rare. A brief abstract of Dr. Farrar's report follows:

As far as could be ascertained, pork is being exported to England from only two places in China, Hankow, on the Yangtze River, and Harbin, in Manchuria. The shipping of pork from Shanghai is under consideration.

A prejudice entertained by certain European residents of China against the use of Chinese pork, on the ground that the Chinese pig is a scavenger, eating garbage, and therefore likely to transmit parasitic diseases, has been transmitted to England, but I have ascertained that not only the pigs exported to England, but in general those sold in the native markets for Chinese consumption, are grain-fed pigs reared on farms under conditions which compare favorably with those obtaining in England. It is true that pigs are to be seen rooting in the streets and feeding on garbage in many cities of China, and it is also probable that these animals are eventually eaten by the poor persons of the coolie class. Pork is freely eaten by Europeans at Shanghai, Hankow, and Harbin, and, I am told, in Yunnan.

Pork is the staple meat food throughout China and that which I have seen exposed for sale in native shops has nearly always been good fat meat, not such as would come

from the lean, pendulous-bellied scavenger pigs. I may add that the average Chinaman is as dainty in his feeding as the average Englishman, and the idea of eating garbage-fed pork is as repugnant to him as to ourselves.

Danger of Disease Slight—Kinds of Pigs Used.

I could find no evidence that parasitic diseases are more common in Chinese than in English pigs, and the testimony of medical men practicing in China is that trichinosis is extremely rare in China, and practically unknown in the Yangtze Valley. *Cysticercus cellulosae* and other parasites are uncommon. As regards the possibility of the transmission of plague from infected districts in China, Prof. Zabolotny, one of the Russian delegates to the International Plague Conference, who has been testing the liability of various animals to infection with human plague derived from a pneumonic strain, states that he has found the pig relatively highly resistant.

The larger part of the pork that has been shipped to England has been obtained from the Province of Hunan, which is a rich and fertile country devoted chiefly to rice growing. On most of the farms from one to several dozen pigs are kept, almost uniformly under very favorable conditions. The Hunanese pigs are a special breed, differing from those I have seen in other parts of China. They have short, erect ears, short snouts, rounded jowls, compact bodies, with broad backs and short hams, and slender tails. The color is piebald black and white and the bristles relatively short and fine. The fibers of the meat are fine and the animal is a good fatterer.

The pig commonly sold in the Hankow native markets is the Honanese. This appears to be a native pig, to the breeding of which no especial attention has been devoted, and which is not far removed from its wild progenitor. This pig has long pendulous ears, a long snout, straight lean jowl, a lean body, with sagging, pendulous abdomen, narrow back, prominent spine, long lean hams, and a tail longer and coarser than that of the Hunan pig. The flesh has a peculiar odor which differentiates it from Hunanese pork, is paler, and has coarse and tough fibers. Even when especially well fed, this animal does not fatten as well as does the Hunan pig.

Veterinary Inspection.

At Shanghai the animals killed at the international and the French municipal abattoirs are inspected by skilled veterinarians and all pigs showing traces of tuberculosis are rejected. The greater number of rejections are made for rouget de porc (swine erysipelas, Rothlauf), the total rejections for all causes during the first 5 months of 1911 numbering 17 out of 14,998 pigs examined. At Hankow the pigs slaughtered are inspected by the police medical officers. At Harbin the inspection is made under the Russian imperial meat-inspection regulations, with equal strictness in the public slaughterhouse and private factories. This inspection includes microscopic examination of all animals killed.

CANTON.

[From Consul General Leo A. Bergholz.]

Pork from Yunnan Province.

The finest pork in China comes from the Province of Yunnan, and has a reputation throughout the country similar to that of the Yorkshire hams in England and the Westphalian hams in Germany. The pigpens are marvels of cleanliness, and the food for the animals is carefully prepared.

Upon the passage of the pure-food law in the United States, the provincial government established a special bureau to supervise the sanitary conditions of the meat factories, especially those making hog products, engaged in the foreign trade. Since then only meat from hogs which ante and post mortem veterinary examinations have shown to be free from disease has been allowed to be shipped abroad. This applies particularly to the exportation of dried meats to the United States and lard to the Philippines. The hog products sent to the United States are sausages of various kinds and prepared dried meats, for consumption by Chinese, and their preparation is very simple. Sausages are made of meat from the hind thighs of hogs, which are chopped fine, mixed with 4 drams of sugar, rice wine, and

table salt, 8 drams of soy, and a pinch of pepper to each 1½ pounds, and dried in the sun until ready for tinning. Dried oysters and duck's livers are added to some varieties. Prepared meats are put up in a similar manner, except that the meat is sliced instead of chopped.

Slaughterhouse Conditions and Inspection.

A special slaughterhouse has been constructed according to hygienic principles for the killing of hogs for the export trade. The building is of brick, with large open spaces for ventilation on all sides, and the floor is made of concrete.

Animals used for the export trade are practically subjected to two different examinations before being killed. Hogs are first brought from the general city hogpens, where an inspection is carried out by the police department, and then transported to specially constructed pens in connection with the slaughterhouse, where they are again subjected to a thorough inspection by special sanitary inspectors. Only such animals as are passed and stamped as healthy by the inspectors are allowed to be killed. Should an animal show any sign of disease it is at once condemned. By paying strict attention to the ante-mortem examination, the percentage of diseased carcasses as revealed by the post-mortem examination is reduced to a minimum. Every precaution is also exercised in the post-mortem examination to detect the unhealthiness of the animals.

The sides of the hogpens connected with the slaughterhouse are of iron rails, the floor is of concrete, and the inspector requires the floors to be cleaned at least once a day. As these buildings are situated on the banks of the river, draining as well as cleaning can be easily carried out. Animals in the hogpens are fed twice daily with cooked cabbage and rice mush.

Lard is prepared by boiling the fat tissue and the fat portion of the meat in a boiler till all of the oil is extracted. The residue is then poured into large China basins and stirred until it solidifies. No foreign substance is used in the preparation of lard.

Report of Philippine Customs Official.

Mr. F. W. Wilson, chief of the customs secret service of the Philippines, who made a careful examination of hog pens and slaughterhouses at Canton early in 1911, reported to the Philippine Government as follows:

The corrals, pork markets, and lard factories appeared surprisingly clean and sanitary. The slaughterhouses are hardly worthy of the name, as each butcher appears to kill his hogs at his own place; but these were also surprisingly clean. The site chosen for a new central lard factory is across the river from Canton proper. It has a couple of good buildings and is, on the whole, very suitable. An arrangement has been made with certain pork dealers whereby the swine will be slaughtered at this factory.

All swine slaughtered pass through certain principal corrals, where a tax is collected on those weighing over 30 pounds, these taxes having been collected upon 588,890 pigs during 1910. Inspectors are stationed at these corrals, and the meat is also inspected in the markets. We found the pens clean and the food wholesome, the latter consisting chiefly of refuse from the manufacture of rice wine, bran from bean and rice flour, sweet potatoes, and squash, which are cooked together.

[Several photographs of the slaughterhouses and sausage and lard factories, forwarded with the foregoing report, may be obtained from the Bureau of Manufactures.]

SHANGHAI.

[From Consul General Amos P. Whider.]

No Pork Exported from Shanghai.

Practically nothing has been done at Shanghai in the exporting of dressed hogs, one shipment of 22 carcasses in August being the total for 1911. There seems to be no provision here for supervision and inspection, for I am informed that no records of such shipments are kept in the British consulate and that hogs are not exported with consular papers. Should the trade develop at Shanghai, suitable regulations would doubtless be put in force, but there is little possibility of its growth at this time.

HARBIN.

[From Consul Lester Maynard, Harbin, China.]

Frozen Pork Shipments.

The refrigerating plant of T. D. Kuznetsoff, of Harbin, has sent a trial shipment of 50 frozen hogs to Vladivostok. The pork successfully passed veterinary inspection, and it is believed that if this shipment proves satisfactory a new and profitable field will be opened up for Harbin exporters.

USE OF AMERICAN TERMS.

[From Consul General George E. Anderson, Hongkong, China.]

Hongkong importers complain that American exporters or manufacturers use American terms in foreign correspondence and in catalogues which are not understood abroad. For example, one firm calls attention to the fact that the term common in the United States "for carloads" is not generally understood in the Far East. The firm says:

It would be better if in quoting prices manufacturers would state "for a minimum quantity of ———," instead of using the term "for carloads." You will appreciate that importers pay more attention to quotations terms for which are distinctly clear to them, and it may be that at times certain importers not knowing the quantity intended by the expression "carload" will not give so much attention as they would to a quotation quoting prices "per piece," "per dozen," "per yard," "per ton," and so on, with a proviso of minimum quantities of so many "pieces," "dozens," "yards," "tons," etc. This may be but a small point, but in dealing with Chinese we believe that it may be a point that will count.

English Company To Build Motor Ocean Vessels.

Chargé d'Affaires Norval Richardson, of the American legation at Copenhagen, reports that much interest is being manifested in Denmark over the formation of an English company to build Diesel-motor, ocean-going vessels of the *Selandia* type. [A description of the *Selandia* appeared in Daily Consular and Trade Reports on Mar. 26.] The new shipyard, which is to be located on the Clyde, expects to begin work in 1913, and, according to the Danish press, has guaranteed to the Burmeister & Wain Co., of Copenhagen, builders of the *Selandia*, one-fourth of all the orders received for Diesel motors.

SPURIOUS ANTIQUES IN THE EAST.

[From Consul General George E. Anderson, Hongkong.]

The attention of tourists traveling in this portion of the world should be called to the fact that spurious goods of all sorts are upon the markets of the Far East for sale to them. Not only are there spurious "antiques" of all sorts, such as chemically treated "old" brass, modern make "antique" porcelains, so-called "ancient" wall hangings, and works of art of all sorts, but there are some especially clever base imitations of standard modern goods.

The imitation of antiques in this portion of the world has taken on all the forms to be found in Europe and elsewhere and has some features peculiar to the East, but the chief imitations of this class have had to do with Chinese porcelains and brass, ancient Chinese and Japanese armor and weapons, old Korean chests, old carved furniture, and similar goods, and in lesser degree of some of the various works of art in fine bronze, ivory, lacquer, and the like, in much of which in fact good imitations are not practicable.

An Extensive and Growing Business in Imitations.

The imitation of old Chinese porcelains, as has long been known to connoisseurs, has long since become a branch of business so extensive and so successful that the sale of a genuine old piece nowadays is an event. While this is generally understood by collectors the general public does not seem to appreciate the fact, for seven large new shops handling such goods were opened last year upon the principal shopping thoroughfare of Hongkong within the three months preceding the opening of what is generally considered the tourist season in this port. The trade in these imitation ancient porcelains has developed so far that there are regular auction sales in Hongkong of this imitation ware. To local people these goods are sold as imitations, but a considerable portion of them eventually find their way into the hands of people without knowledge of the actual facts and spurious "ancient" Chinese vases and other porcelains made in Europe and Japan have been scattered all over the world.

Similar imitations of ancient brasses and bronzes, ivories, lacquers, and other art objects are made and sold in these or similar sales; in fact there is almost no limit to the business. Genuine old pieces in brass, bronze, porcelain, jade, or in hangings or other embroideries or in similar goods beloved of collectors are practically not to be had on the market in Hongkong or other eastern ports except in very limited quantities, and to some extent, at least, there is better opportunity to acquire good Chinese and Japanese pieces in New York or London than in Hongkong or Shanghai. In spite of this fact, generally known to collectors and more or less known to the casual traveler, dealers here do a thriving and a very profitable business.

Baits for the Tourist.

Perhaps the worst feature of the situation is the fact that while there is a fair supply of good, standard quality modern art goods of all these classes the vast mass of such goods now sold are imitation goods of a quality false in some respect; and while the average tourist buyer may be on the lookout for imitation antiques he may be readily deceived by the "bronzes" of baser and cheaper metals, "silver" of pewter, particularly souvenir spoons and the like, clay "filled" silk, brass in all shapes and grades made in imitation of old pieces; in

short, practically everything of any merit in Chinese or Japanese art, ancient or modern, which may be looked for.

There is almost no limit to the classes of goods now sold in regard to which care must be taken. For example, silk goods are being adulterated to an extent and in a way never before followed, and quantities of Japanese and Chinese goods supposed to be made from the native-worked Japanese or Chinese silks are partly American cotton. Silk hosiery is sold which is not only not all silk, but is undersized and otherwise unwearable. Embroidered screens will be found made of the flimsiest materials glued in the most temporary manner. Ivories will be found to be bone or imitation ivory.

There will be found a real grade and an "export" grade of porcelains like the beautiful Satsuma porcelains of Japan. Imitation cloisonné ware is on the market in great quantities. Japanese carved "cherry" wood furniture made for sale not only in Japan but in other parts of the Far East and sold generally in Hongkong and even made for direct export to the United States and Europe, is now generally made in white soft wood stained and varnished. Much of the Japanese silver for sale in all these ports is pewter or silver of so low a grade as to lose all merit as such. Chinese blackwood furniture in some cases is white wood stained, but this is not so prevalent now as it was, for the reason that the Chinese guild concerned has stopped the practice of imitating the expensive heavy "black" wood.

Imitations Made to Order.

Another feature of trade in such goods may be indicated by the fact that recently a large order was placed in Hongkong for "Siamese" brass, and most of the brass workers of this port at present are busily engaged in beating out beautiful brass trays with the usual Siamese engraved decoration and characteristics, to be sold in Siam as Siamese—beautiful work, but not what it is sold as being. Considerable modern Chinese brass is made in Japan and some even in Europe.

Some of these goods are sold as imitation or second or third class goods, but there are many dealers who are not very scrupulous about calling the attention of their customers to the fact that such goods are imitation, and actual misrepresentation is common. Many of the more patent deceptions have long been understood by casual travelers in the Far East, but there are very modern and up-to-date imitations of old or other meritorious goods which deceive even more experienced travelers. It seems needless to add that travelers in the Far East should not only buy antiques, curiosities, and the like with the greatest care, but should also give particular attention to the actual composition, standard quality, and real merits of modern goods purchased. Against prevailing conditions reputable business men in all eastern countries have long been contending, but the present system is profitable and so long as people will buy them such goods will be sold, and the only adequate protection for the purchaser is his own wariness.

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.

THE GOLD MINES OF FORMOSA.

[From Consul Samuel C. Reat, Tamsui.]

Gold mining in Formosa is no new enterprise. The discovery of the first gold dates back to the Chinese régime. In 1890, when Liu Ming-Chuan, that astute and progressive administrator, was carrying forward the first railroad construction, Chinese coolies found the yellow metal while excavating for the foundation of a railroad bridge over the Keelung River at Shichito. In all subsequent prospects no mines have been located outside of the Keelung River watershed.

Both placer and quartz mines have been operating for many years, but placer mining has been virtually abandoned. There are now just three quartz mines being worked, and their annual output appears to be diminishing. But the statistical information is somewhat misleading, for the supply of treatable ore at two of the mines will last for many years. Although undoubtedly the grade is growing less, the supply is good and the value is holding fairly well. By enlarging their plants and by installing improved machinery the companies will be able to treat lower-grade ore in larger quantities. These mines are located in north Formosa, within 10 or 12 miles of Keelung, the chief port of Formosa. They are called Botan-ko Kozan, Kinkwaseki Kozan, and Zuiho Kozan, the address of each being Keelung, Formosa.

The Botan-ko Mine.

The Botan-ko consists of 600 acres, and has been operated since 1903. Its equipment is 6 Huntington mills; 6 gravity stamps, 1,000 pounds each; 20 small stamps; and 13 motors. The system is amalgamation, concentration, and cyaniding; sand, percolation, and slime treatment.

This mine smelts its own concentrates. This is a gold ore with a small amount of silver. It also contains about six-tenths of 1 per cent of copper. There is a great deal of ore worth about \$2.50 a ton, and the company is planning to treat 200 to 400 tons per day by enlarging the capacity. There is some ore worth nearly \$5 per ton. At present about 100 tons a day are being treated. The Botan-ko mine should run for several years, but only by treating lower-grade ore in larger quantities. Hydroelectric power is used.

The Kinkwaseki Mine.

The Kinkwaseki mine comprises 2,246 acres. The general equipment is not unlike the Botan-ko, except that there are 80 light stamps. The ore is not highly silicious. There is here a cyaniding ore also, and about 100 tons are treated daily by smelting. This mine should run for many years because of the large amount of ore. Some ore of this mine has been worth \$9 a ton. The company intends to increase the capacity of its plant in order to handle the treatable ore. The power is hydroelectric and steam.

The Zuiho Mine.

The Zuiho mine comprises 2,046 acres. Its equipment is 9 Huntington mills. The same process of cyaniding, sand and slime, is used here. This mine sells its concentrates to the Kinkwaseki. The ore consists of two classes—oxidized and sulphide. They are eventually

treated together. The amount of ore treated daily is about 85 tons, with a value of \$6 per ton. This mine is now a small producer and is on the decline. Power is derived from electricity generated by steam.

In contradistinction to many enterprises in Formosa, these gold mines are being exploited by private capital. The following figures cover the product of the three mines for the quinquennial period, 1906 to 1910:

Year.	Botan-ko.	Kinkwa-seki.	Zulho.
1906.....	\$318,324	\$346,462	\$243,360
1907.....	275,785	301,796	220,542
1908.....	191,535	604,859	186,707
1909.....	176,202	709,890	166,964
1910.....	134,147	683,947	231,895
Total.....	1,095,993	2,746,954	1,049,477

AUSTRALIAN NOTES.

[From Consul William C. Magelssen, Melbourne.]

Uruguayan Agricultural Students on World Tour.

A party of engineers of agriculture from the Montevideo University, Uruguay, has just completed a visit to the State of Victoria, as a part of a world tour, and were while here under the guidance of the chief field officer of the Department of Agriculture. The members of the party are investigating agricultural and land settlement questions on behalf of the Government of Uruguay. They have been through Europe and will proceed through New Zealand and the United States on their way home. The embassy was greatly impressed with the development of Victoria and the great possibilities of the State. [Another body of these students is making a 3-months' tour of the United States, as announced in Daily Consular and Trade Reports for November 3, 1911. It is understood that the party coming from Australia is about to join them in Salt Lake City.—B. of M.]

Large Orders for Locomotives.

In the State of Victoria there has been an altogether unexpected development in railway traffic within the last few years, the passenger and goods business having increased beyond all anticipations. This has resulted in immediate demands for additional haulage power, and 40 engines have been ordered from England and the United States, of which 15 Baldwin locomotives are already in service. An elaborate program of locomotive construction has now been decided on by the Victoria Railway Department, and during the next three years 210 locomotives are to be built in the State. These will be constructed at the rate of 70 per annum—30 at Newport, 20 manufactured in parts by Victorian contractors and erected at Newport, and 20 manufactured wholly by private firms. While it is believed by the department that no Victorian firms will be able to undertake building complete locomotives during the first year, and that it will be necessary to allot such work to firms in other States of the Commonwealth, it is thought that by offering inducements for a continuance of the work Victorian firms will be enabled to undertake the construction of the 20 whole locomotives in each of the succeeding two years.

NEW CHAMBER OF COMMERCE IN GREECE.

[From Consul A. B. Cooke, Patras.]

Patras is the chief port and metropolis of western Greece. It has 40,000 inhabitants, and is the commercial center and distributing point for the Peloponnesus and the Ionian Islands, representing a supporting country of well over 1,000,000 people. It is the center of the currant trade, which represents an annual business of \$12,000,000 to \$15,000,000. It also has large interests in olives, olive oil, citrons, wine, cheese, and tobacco.

There are three lines of fast steamships from this port to New York direct, with a service more than once a week, the journey taking 14 days. The business of Patras is steadily growing, especially its outward trade to New York. Its import trade is also increasing, as indicated by the fact that in 1911 duties collected at this port on incoming merchandise were \$100,000 more than in 1910.

The business men of Patras are keenly alive to the interests of their city, and are taking steps to bring it into closer commercial relation with the outside world. One of the most notable recent measures was the reorganization in 1911 of the chamber of commerce of Patras. This chamber had been in existence in its old form for more than 50 years, but its organization was not of such nature as to handle to the best advantage the problems of a growing and busy city. In 1911, therefore, through the zealous efforts of a small group of leading business men, the chamber was reorganized along modern lines, with boards to handle the various questions that came before the city. It now consists of some 250 of the principal business and professional men, with rigid requirements for membership.

The chamber has purchased and fitted up sumptuous quarters on the leading square of the city, consisting of committee rooms, luxurious reading rooms, a public hall, billiard rooms, a grill, and all other appointments of a modern club. In the reading rooms are the daily papers of five European countries, magazines, commercial journals, illustrated weeklies, and monthly periodicals from almost all quarters of the world.

The chamber will take pleasure in giving any information with regard to Patras, its business, or the country which it represents. Letters addressed to "The President of the Chamber of Commerce, Patras," will receive prompt attention. The letters may be in English.

Journals wishing to have their issues displayed in the reading rooms are invited to send them addressed "Reading Rooms, Chamber of Commerce, Patras, Greece."

ANTIQUITY OF CHINESE BURIAL CUSTOMS.

[From Vice Consul General Myrl S. Myers, Mukden.]

There is no demand in the Mukden district for American funeral cars, hearses, etc., and it would be difficult to create one. The catafalque employed in China was used before the Christian era, and I believe, with the exception of the T'ang dynasty, which held the throne of the Chinese Empire from A. D. 618 to 907, it has been used ever since. In most cases the situation of the burial grounds and the condition of the roads preclude the use of a 4-wheeled vehicle.

INDIA WHEAT ELEVATOR PROBLEM.

[From Consul Stuart K. Lupton, Karachi.]

The revised financial statement of the Punjab for the fiscal year ending March 31, 1913, contains a provision of two lakhs of rupees (\$64,880) for the erection of a wheat elevator at Lyallpur. Lyallpur is the seat of the Punjab Agricultural Experiment Station, and it is stated as well that storage accommodation was insufficient during the past year. The estimate adds:

It is hoped that, if the Government leads the way, private enterprise may be directed to this channel, which has been found so useful in America, not only for the storage of wheat but also enabling the cultivator to get it properly classified and to obtain credit for his produce without putting it immediately upon the market. The success of the venture can not be assured without the cooperation of the Northwestern Railway and of the port authorities at Karachi; but if it is demonstrated that the elevator system is suitable to the requirements of the great wheat-producing tracts in the Punjab, it will clearly be to the interest both of the railway and of the port to provide facilities for export in bulk.

I am of the opinion that this will be the entering wedge for the construction of elevators in Northwest India. The opponents of the system claim that no trust can be placed in the probity of the persons placed in charge of the elevators, and that false certificates will be responsible for more trouble than is found in the present system. Certain exporters in Karachi by long residence, etc., have acquired facilities for handling export wheat which are superior to those of the later comers and do not wish to see their competitors placed on an even footing. Furthermore, the Port Trust has been committed to a very large expenditure for additional stacking grounds for export, and they are loathe to admit that this expenditure (about \$1,297,600) is practically wasted. Although a local firm last year requested a site in the Karachi Harbor for erecting an elevator at its own expense, permission was refused by the Port Trust.

It is very probable that this work at Lyallpur will be placed in the hands of the Public Works Department, although this is not certain. Further information in regard to this work will probably be given out later by the Financial Secretary at Lahore.

FRUIT JARS IN ENGLAND.

[From Consul General John L. Griffiths, London.]

With reference to the trade in fruit jars in the United Kingdom, while there is a large sale of fruit bottles (glass) and jars to the large preserving firms, the most common containers are simply round glass bottles, with wide necks. The jars are usually upright and round, with a small groove near the top for fastening securely the parchment paper for the top by means of strong string.

The containers used by housewives consist almost wholly of old bottles and jars in which jams, jellies, etc., had been purchased from the local tradesmen, such jams and jellies having been prepared by the large manufacturing concerns. As these bottles and jars are not returnable to the tradesmen, it will be apparent that housewives may readily accumulate a sufficient stock for bottling their own home-made products. The custom of preserving fruits in their juices, as is done in the United States, does not prevail in this country to any appreciable extent, and hence there has been, and is, practically no demand for the air-tight American jars.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8697. Real estate.**—An American consul reports that a foreign Government official is interested in the purchase of land in the United States, and it is thought that he will shortly leave to investigate American real estate. He is especially interested in the Pacific northwest.
- No. 8698. Coal.**—A business firm in a Mediterranean country believes that the present is an excellent opportunity for American coal exporters to gain the local market. It is stated that the supply of foreign coal is low, and prices, both of foreign and domestic, are rising rapidly. This firm advises an American consular officer that it desires to get in touch with coal exporters in the United States, as it is thought that American coal will be able to compete successfully in that market.
- No. 8699. Hydraulic pumping plant.**—A resident of a Latin American country has a concession for the construction of a hydraulic pumping plant to be used for supplying water for irrigating his lands, and an American consular officer reports that American manufacturers and exporters who can supply machinery, etc., needed for the installation of such a plant should communicate with this person at once.
- No. 8700. Rubber and coconut estates.**—An American consular officer in the Far East reports that a company in his district wishes to make connections with American firms desirous of purchasing rubber in that region, and is prepared to enter into contracts with firms for the supply of this product.
- No. 8701. Anchors, chains, ships' plates, and shipbuilding supplies.**—A business man in Italy informs an American consular officer that he desires to be placed in communication with American manufacturers of anchors, chains, ships' plates, and shipbuilding supplies of all kinds with a view to representing them on that market. He states that he is in a position to furnish satisfactory references and is in touch with the leading shipbuilding yards as a contractor for furnishing them with the various supplies mentioned. Correspondence may be in English or Italian.
- No. 8702. Railroad material.**—If American exporters and manufacturers of all kinds of railroad material, for construction and operation, will communicate direct with a representative of a railway company in Mexico they may be able to find a sale for their products. An American consular officer reports that this company proposes to build a railroad between two points in that country.
- No. 8703. Post-office boxes and equipment.**—An American consular officer in Canada reports that a firm in his district, well known as extensive dealers in office equipment and furniture, desires to be put in touch with American manufacturers of post-office boxes and equipment. This firm desires to hear from such manufacturers at the earliest possible moment.
- No. 8704. Representation in Germany.**—A business man in Germany, who has been engaged in the clothing business in that country for 15 years, has expressed a desire to an American consular officer to represent any line of American goods suitable to that market. He furnishes references. Communications should be addressed direct to the inquirer and should be in German.
- No. 8705. Newspaper printing press.**—An American consul in Africa reports that a commission agent in his district desires quotations from American manufacturers of newspaper printing presses for a \$5,000 rotary press. An order for such a press is about to be placed, and American offers will be considered. Sale can not be made on a strictly cash basis, but fairly liberal credit may secure order; part payment to be made with order, and seller protected by ample guaranty.
- No. 8706. Azimuth mark and steller camera huts.**—The American consulate general at Ottawa, Canada, reports that tenders will be received until May 6, 1912, for constructing azimuth mark and steller camera huts for the Royal Observatory at Ottawa. Plans, etc., can be seen at Department of Public Works, Ottawa.

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COMMERCE OF THE NETHERLANDS.

[By Consul General Soren Listoe, Rotterdam.]

Generally speaking, the year 1911 was a prosperous one for the Netherlands, for while domestic drought and foreign wars at times threatened the interests of the farmers and business men, fortunate circumstances and the geographical location of the country influenced escape from serious losses.

If the agricultural interests of the Netherlands suffered during 1910 from too much moisture, the reverse was the case last year. Owing to the low character of the country, however, part of which is under sea level, the numerous canals and ditches crossing and recrossing the fields and grass ranges remained filled with water until late in the summer, and, while the pastures withered for a time thus reducing the supply of cattle feed, a moist autumn caused the grass to grow again, and the loss to the dairy interests was reduced. The crops of grain and roots were naturally short, but the practically total failure of these products in many parts of Germany created higher prices and the Dutch farmer shared in these increased returns.

Operations of the Money Market.

The money market was fairly steady and rates were easy throughout the greater part of 1911, especially as compared with some other European centers of finance. While in October discount rates in the open German market had risen to $4\frac{1}{2}$ per cent, the quotation here, though for a short period, was as low as 2 per cent, and the German markets took advantage of this low discount rate by borrowing, thus restoring equilibrium. The discount rate of the Netherlands Bank dropped to $3\frac{1}{4}$ per cent on January 9, and on May 15 to 3 per cent, remaining at that rate until September 30, when it increased to 4 per cent, apparently the result of the Turco-Italian war.

As it was apparent to observers of financial matters that an upward movement in the rates was inevitable, bill brokers bought heavy items for discount at the bank just before the rise, thus relieving the open market of anything resembling tension.

The carry-over rate last year averaged 3.24 per cent against 4.27 per cent for the previous year. This decrease was at least partly

due to the stringent measures observed by the most reliable financial institutions to suppress speculation on the part of people of limited means by demanding a margin of 10 to 25 per cent for securities to be carried over.

Stock Exchange—The Netherlands Bank.

The stock exchange during last year was anything but prosperous. The public was slow to invest, especially on speculative securities. The State loan of \$16,797,880, for which the Government toward the end of 1910 declined an offer of 96½ per cent, was early in 1911 taken over by a syndicate at 95½ per cent to be issued for public subscription at 96 per cent, and has since been at a discount, at one time of 2½ per cent.

The value of bonds, securities, etc., offered and subscribed to in the Netherlands last year was \$397,389,864 against \$467,165,406 in 1910. Of the total last year, Netherlands securities, etc., were valued at \$79,632,582, and foreign securities at \$317,757,282.

American issues were not subject to fluctuations, nor did the public operate in stocks as freely as in former years, although the fairly low quotations prevailing prompted to a limited extent some purchases. This restraint, it is asserted, was due to various causes.

The position of the Netherlands Bank was further strengthened last year as regards gold available, which amounted to \$56,000,000 at the end of the year against \$53,000,000 for 1910 and \$47,600,000 for 1909. The enormous efflux of silver coins, however, reduced the bank's balance of the white metal to less than \$4,800,000 at the end of last year compared with \$9,333,333 in 1910 and \$19,600,000 in 1909.

Improvements in the East Indian colonies necessitated last year the exports of gold and silver coins valued at \$1,600,000 and \$5,200,000, respectively.

Receipts and Sales of Coffee.

Considerable interest was manifested in Java coffee last year. The price early in January was 17.5 cents per 1.1 pounds, advancing in the February and June auctions to 18.8 cents, continuing to improve in sympathy with Santos up to October, when it was quoted at 20.8 cents, which figure was maintained until the close of the year.

The imports of coffee into the Netherlands during 1911 amounted to 1,871,100 bags, against 1,442,100 bags in 1910. Of the quantity received in 1911, 1,542,800 bags were from Santos, Brazil; 175,400 bags from Java, 67,000 bags from Central America, 34,400 bags from Venezuela, 30,200 bags from Africa, 20,800 bags from Padang, Macassar, and Menado, and 500 bags from other East Indian places. There were sold in the Netherlands last year of the East Indian coffee 95,257 bags and 243 cases by private firms and 22,845 bags by the Netherlands Trading Co. There were also auctioned by the Government at Batavia, Java, during last year 7,450 piculs of 136 pounds each against 11,800 piculs for 1910. The stock of coffee in the Netherlands at the end of 1911 was 636,300 bags, against 511,800 bags at the close of the previous year.

There has been a marked increase in the receipts and deliveries of Santos coffee. The Royal Dutch Lloyd Steamship Co., running a regular line between Brazil and the Dutch ports, will add two

large steamers to its fleet during the present year, and thus keep up a regular fortnightly service, which will contribute to strengthen the coffee markets in the Netherlands.

The Rice Market.

The total imports of rice into the Netherlands last year were 3,110,000 bags, compared with 3,279,000 bags for the preceding year. It is estimated that 1,612,000 tons of rice were shipped from various ports last year, of which 1,446,000 tons arrived in Europe. Cleaned rice was quoted on the Netherlands market in March at \$2.30 per 110 pounds, reaching \$3.20 in September, and remaining firm during the fall.

The quantity of Burma rice available for export during the present year is estimated at 2,450,000 tons against 2,600,000 tons for last year, and of the Saigon crop 700,000 tons, compared with 650,000 tons in 1911. It is evident that the Japanese product is needed for home consumption, and can not longer be counted upon for the foreign market.

Several shipments, aggregating 7,500 tons, of Texas rice were imported by a Rotterdam miller at the beginning of 1911. These shipments were made primarily to relieve the American market of the large stock of that kind on hand. The quality is said to be excellent, but the price too high for this market. Negotiations were pending at the beginning of the present year to ship the greater part of this rice back to Texas, which would prove a profitable deal on account of the high prices prevailing at the time on the American market.

Returns from the Tobacco Sales.

The various auctions held in the Netherlands last year for the sale of West Indian tobaccos realized a total of \$32,400,000, against \$22,800,000 in 1910. The total proceeds from the Sumatra crop were \$18,986,000, a gain of \$5,200,000 over the preceding year, although the crop was 29,000 packages below that of 1910. The average selling price, however, was 20 cents per 1.1 pounds higher than for 1910, due to the splendid quality of the tobacco, which made it desirable for wrappers. The average price for the year was 52.4 cents per 1.1 pounds. There were purchased of the Sumatra crop for the United States last year about 29,000 packages compared with 21,000 packages for 1910. The new crop, which will be marketed during the present year, is estimated at 264,000 packages, a gain of 30,000 packages.

The proceeds from the 457,929 packages of Java tobacco were \$10,952,000, compared with \$7,650,000 from 303,532 packages in 1910. The average price last year for this crop was 13.6 cents per 1.1 pounds, against 14.9 cents in 1910.

There were 14,961 packages of Borneo tobacco, valued at \$1,160,000, sold in the Dutch markets last year at an average price of 52.4 cents per 1.1 pounds, against 14,586 packages, with a valuation of \$860,000, and sold at 40.4 cents for the preceding year.

Maryland tobacco continues to enjoy a good reputation in this market. The French "Regie" sent its agents to the United States in October with orders to purchase all they could use. When these purchasers left, prices declined and the Dutch dealers bought large quantities. The prices of Kentucky and yellow Virginia tobaccos

are too high for consideration on this market. The market in burley tobacco was uncertain. Prices at the beginning of the year were low and the Dutch dealers bought large quantities, but in May prices advanced, and importations were suspended until the fall.

There were 3,400 packages of Manila tobacco sold at auction in Amsterdam last year at good prices, and the imports at Rotterdam were disposed of privately.

The Austrian Government last year decided to return to the old system of buying the tobacco for the "Regie" from sundry merchants instead of giving the contract to one firm.

Receipts, Shipments, and Prices of Sugar—Tea Imports.

The year 1911 was a remarkable one for the sugar trade. At the beginning of the year the market was easy, due to the large 1910-11 crop, the year opening with \$4.30 per 110 pounds; but from then up to the beginning of September prices gradually increased. The continued hot weather last summer caused fears that the beet-root crop would be seriously injured, and wild speculative purchases were prevalent, the prices for October-December deliveries reaching in September \$8.35 per 110 pounds. When the new crop began to arrive prices dropped to \$6.70 per 110 pounds and the year closed at that price.

The imports of raw sugar for consumption into the Netherlands last year were 85,793 tons, compared with 56,698 tons the preceding year. Of the total last year 43,446 tons came from Germany, 32,946 tons from Belgium, and 6,347 tons from the Dutch East Indies. The exports of raw sugar amounted to 67,323 tons, against 48,535 tons, practically all of which was destined for the United Kingdom. The shipments of refined sugar amounted to 128,747 tons, compared with 67,187 tons for 1910. Of the total last year, 105,064 tons went to the United Kingdom.

The imports of Java tea into the Netherlands last year showed a continued decrease. The total quantity of this tea handled by the Tea Establishment was 133,767 chests, of which 66,975 were for home consumption and 66,792 for export. The prices were firm and it was only when the new supplies from China began to arrive that prices weakened. The average price for the year was 18.2 cents per 1.1 pounds.

Trade in Nutmegs, Mace, and Cloves.

The prices of nutmegs have been low for some years, with large stocks on hand. The past year, however, indicated a partial recovery. The imports into the Netherlands in 1911 were 1,015 tons, against 1,010 tons the preceding year, and the available stock in the bonded warehouses at the end of 1911 was 1,425 tons. The price for the average good quality—110 to 120 nutmegs per 1.1 pounds—was 11 to 15 cents.

There was a good demand for mace throughout the year, and the prices were 15 per cent higher in the December sale than in March. Papœa mace sold as high as 56 cents per 1.1 pounds. The total arrivals last year were 310 tons, against 285 tons in 1910, and the stock on hand at the end of the year was 37 tons.

Amboina cloves amounting to 1,160 bags of 110 pounds each were imported. Sales were slow and the prices were 18 to 20 cents per

1.1 pounds. Zanzibar cloves sold at 16 cents in January and 11 cents in December. There were 407 tons of cloves in the bonded warehouses in the Netherlands at the beginning of December last.

Speculation in Pepper—Receipts and Sales of Cinchona Bark.

There was much speculation in pepper last year, and the prices advanced from 8 to 11.5 cents per 1.1 pounds, notwithstanding the large visible stocks on hand. The arrivals into the country were 2,862 tons, against 2,070 tons for 1910, and the stock on hand at the end of the year was 3,936 tons.

There was a decline in the imports of cinchona bark last year compared with the previous one. The Government product arriving amounted to 6,696 packages and of private cultivation 87,671 packages, against 7,059 and 96,284 packages, respectively, for 1910. At the inscriptions there were sold 14,690,951 pounds of factory bark, with 966,528 pounds of quinine, and 2,106,082 pounds of pharmaceutical bark, with 71,643 pounds of quinine.

Demand for Cocoa and Cocoa Butter.

To cope with the increasing consumption of cocoa and chocolate there has been a greater output in practically all the producing countries, and in the second half of the year there were rumors of a cocoa valorization, based upon the same principles as those of the Brazilian coffee trust. The imports of Java cocoa were 26,500 bags, a decrease of 700 bags compared with 1910. The Guayaquil product was in good demand, and large quantities were imported at \$12 to \$15.50 per 110 pounds, according to grade. There was a brisk business in Trinidad cocoa, and the year closed at \$13.50 per 110 pounds. The Surinam crop was not up to expectations in quantity, but the quality was somewhat improved.

At the monthly auctions during 1911 one firm offered for sale 2,241,800 pounds of cocoa butter, against 2,088,000 pounds the previous year. The prices during the first five months were 31 and 32 cents per 1.1 pounds, but increased in June to 40.5 cents, which price prevailed until the November auction, when quotations declined and closed the year at 31 cents. There were also sold supplies of lower grades at an average price of 27 cents per 1.1 pounds. The demand for cocoa butter is steadily growing.

Increased Prices on Kapok—The Hide Market.

There were 66,784 bales of East Indian kapok imported into the Netherlands last year, against 67,176 for 1910. The prices increased about 10 per cent on this product compared with 1910. The quotations at the beginning of the year were 6 to 18.4 cents per 1.1 pounds according to grade.

The year 1911 opened with poor demand and weak prices for Java hides. About March the market improved and the prices advanced to such a degree that tanners complained that the prices of hides were higher than for leather. Prime cattle hides, fit for the chrome tanning, were firm throughout the year and found ready buyers. Buffalo hides were not in good demand, and several lots remained unsold. South American hides arrived regularly throughout the year, but were generally sold to foreign countries, as the home demand was limited. The East Indian dry cattle hides sold at 16 to 48 cents

and the dry buffalo hides at 12 to 27 cents per 1.1 pounds, according to size and quality. South American dry salted hides were quoted at 13 to 27 cents.

Increased Imports of Rubber—Tin Trade.

For over 50 years the Rotterdam rubber market has been established, and up to 1895 all the African product was brought to this market. The total imports of rubber into Rotterdam last year were 2,637,800 pounds, against 2,530,000 pounds for 1910 and 2,508,000 pounds for 1909. Of the total last year, 1,430,000 pounds were from Africa, 935,000 pounds from Java and Sumatra, 215,600 pounds from South America, and 57,200 pounds from Borneo. To the foregoing total might be added 1,876,600 pounds of jelutong and 1,683,000 pounds of Surinam leaf balata. The arrivals of rubber at Amsterdam were 519,200 pounds, of which 266,200 pounds were plantation output. Prices of rubber ruled downward during last year.

The increase in the price of tin, which was started during the latter months of 1910, continued throughout 1911. In January it was quoted at \$41.40 per 110 pounds and in December at \$49.20. The imports of tin in 1911 were 492,111 slabs of 74.8 pounds each, of which 432,411 slabs were Banca, 55,200 slabs Straits, and 4,500 slabs Biliton. The Netherlands Trading Co. will auction off 460,000 slabs of Banca tin during the present year. The exports of tin out of the Netherlands last year were 20,598 tons, of which 11,251 tons were destined for Germany and 3,033 tons for the United States.

Market Conditions in Linseed and Rapeseed.

The prices of linseed fluctuated during the greater part of last year. The market became firm for a time, based on unfavorable crop reports. American importers came into the market and bought not only the available supply of seed and oil, but contracted for future shipments. The prices paid for linseed were \$136 to \$180 for the La Plata, and \$151 to \$189 for the Bombay per 4,320 pounds. The total receipts of linseed in Europe during last year were 5,061,000 quarters, of which Argentina furnished 1,948,500 quarters, British India 2,451,000 quarters, and Russia 661,500 quarters. Conditions in the Dutch oil mills were unsatisfactory, owing to fluctuation in seed prices. The highest and lowest quotations for linseed oil last year were \$22 and \$14, respectively, per 220 pounds, and the closing price for the year was \$16.

The trade in rapeseed was steady throughout last summer, as the demand was fully met by the British Indian product, but owing to the unfavorable reports from the Danube and other sections the quotations were firmer, and the year closed with the relation between the market quotations of seed and oil out of proportion. The failure of a speculator at Antwerp caused forced sales of large quantities of oils and seeds at Paris and Berlin, and this contributed to disturb the market.

Prices of Turpentine and Rosin—The Indigo Supply.

The prices of turpentine were high during the first three months of 1911, being \$14 to \$18 per 110 pounds, but they gradually dropped to \$8.20 in November, and at the close of the year the ruling price was \$9.20.

Rosin was firm up to May, market quotations for that month being \$4.40 per 110 pounds. The prices gradually dropped to \$3.56 in

November, but regained somewhat toward the end of the year, when sales were good.

During last year there were 815 cases of Java indigo imported into the country, of which 47 cases remained unsold at the end of the year. Owing to the limited supply the new arrivals were sold at advanced prices, but in June a reaction set in and brought prices down fully 10 per cent. Prices at the end of the year were \$1.04 to \$1.56 per 1.1 pounds, according to grade.

Quotations in Oleo and Cottonseed Oils, etc.

The prices of some of the materials used in the manufacture of margarin were high at the beginning of last year. By March neutral lard had decreased from \$31 in January to \$23 per 220 pounds. Oleo oil was quoted at \$23 in January, but by April was down to \$20.50, at which prices the Dutch manufacturers until August bought large stocks of the best grades. In the latter month oleo oil advanced to \$27.25 and neutral lard to \$24.50, and the year closed at these prices.

Cottonseed oil remained high during the greater part of the year, notwithstanding the fact that the price of lard was considerably lower than for some time, which naturally caused a smaller demand for compound lard. The consumers had not contracted for future supplies and were consequently obliged to enter the market regular. The prices for choice butter oil were over \$16 per 220 pounds, but declined to \$15.64 in May. This price remained for the old crop oil even when a record new crop was reported, and which was offered at \$14 and later at \$12.85, at which price a large business was done. There were 225,000 barrels of the old crop on the market when the new oil began to be marketed. At the beginning of November as much as \$16 was paid for spot oil, but in the last part of the month and in December the price was down to \$14.

Decreased Consumption of Petroleum—Increased Cost of Breadstuffs.

The imports of petroleum into the Netherlands last year were 3,091,000 barrels, against 3,420,000 barrels for the previous year. The consumption of petroleum in this country, however, has been on the decrease for the past five years. That consumed last year amounted to 1,132,000 barrels, against 1,204,000 barrels five years ago.

Prices of all kinds of breadstuffs, excepting wheat, advanced considerably during the latter part of last year, due to the drought. That the wheat market was not affected was probably due to the large crops during 1910 and 1911. Wheat was quoted at the end of 1911 at \$95 per 2,400 kilos (1 kilo=2.2 pounds), rye at \$72 per 2,100 kilos, corn at \$74 per 2,000 kilos, and barley at \$72 per 2,000 kilos.

Decreased Output of Herring.

The 1911 herring catch was a disappointment, the total catch of the Dutch herring fleet being only 650,000 barrels, against 750,000 barrels for 1910 and 753,000 barrels for 1909. The total number of vessels employed in the herring fishery was 768, compared with 737 in 1910 and 748 in 1909, and the number of men employed on the fleet last year was 9,200.

On account of the excessive heat during July and August and the high temperature of the sea water, half of the catch of many of the

ships was spoiled more or less and had to be destroyed. The prices obtained for fish were satisfactory, being as follows, per barrel: July, \$7.40; October, \$8.40; and December, \$7.60.

Import and Export Trade of the Country.

The following statement shows the principal articles imported into and exported out of the Netherlands during 1910 and 1911 in tons of 2,000 pounds:

Articles.	Imports.		Exports.	
	1910	1911	1910	1911
	Tons.	Tons.	Tons.	Tons.
Asbes.....	148,199	148,199	107,135	125,547
Bark.....	32,963	28,625	21,948	18,686
Beer and malt extract.....	26,562	25,403	30,844	32,501
Breadstuffs:				
Barley.....	944,280	1,063,664	693,191	829,596
Buckwheat.....	20,661	24,121	6,914	7,989
Corn.....	782,060	825,860	328,193	366,939
Flour—				
Rye.....	98,067	106,617	77,123	83,704
Wheat.....	230,323	218,887	34,781	36,784
Oats.....	586,894	664,340	482,207	562,649
Rye.....	661,948	764,663	388,333	454,713
Wheat.....	2,787,098	2,756,306	2,406,245	2,390,186
Coal.....	16,348,121	17,945,780	8,616,124	10,358,894
Coffee.....	131,880	137,830	96,627	107,441
Cotton.....	107,680	110,137	86,721	80,682
Drugs, chemicals, etc.....	825,699	841,282	621,662	582,667
Dry goods.....	98,512	89,424	96,486	96,941
Earthenware, etc.....	447,691	441,343	224,262	222,661
Farina.....	84,476	78,198	126,118	124,490
Fertilizer.....	1,515,332	1,647,266	1,064,694	667,622
Fish.....	32,866	30,377	202,867	172,786
Flax and hemp.....	56,206	61,833	70,699	89,769
Fruits:				
Fresh.....	131,062	128,126	104,961	146,336
Other.....	77,939	67,375	46,642	47,521
Glass and glassware.....	116,273	109,669	101,570	96,111
Hides, skins, and leather.....	66,640	71,820	56,861	64,386
Machinery.....	187,922	176,926	89,784	136,614
Mercery and toys.....	79,786	87,469	59,967	70,636
Metals:				
Manufactured, n. e. s.....	1,356,091	1,389,409	1,121,506	1,008,466
Raw, n. e. s.....	2,378,321	2,683,690	2,006,204	2,108,540
Oils:				
Cottonseed.....	36,315	33,261	23,078	26,663
Fish.....	14,779	19,235	11,310	14,394
Peanut.....	4,215	2,673	11,694	10,879
Petroleum.....	483,551	496,226	319,260	314,916
Sesame, etc.....	26,227	20,390	26,126	20,446
Other.....	413,946	504,664	467,784	467,660
Palm nuts.....	46,756	45,908	43,722	47,434
Paper.....	185,007	192,000	241,679	250,184
Peanuts.....	98,067	85,707	34,761	48,966
Provisions:				
Butter.....	2,742	3,853	36,611	34,286
Lard.....	18,226	38,464	19,553	29,157
Margarin.....	30,329	55,034	86,938	82,176
Meat.....	4,640	6,381	60,816	65,213
Tallow, etc.....	67,966	93,644	50,279	46,974
Rattan.....	29,694	26,177	15,229	19,116
Rice.....	396,068	368,348	233,734	221,116
Salt.....	193,944	180,242	69,545	76,434
Seeds.....	788,311	586,461	455,309	317,413
Sirup and molasses.....	36,985	37,709	17,868	30,143
Spices.....	17,782	16,662	16,061	16,117
Spirits.....	29,756	24,543	70,430	68,611
Stone.....	3,661,590	3,364,275	1,528,289	1,377,968
Sugar.....	319,889	363,898	408,534	461,296
Sulphur.....	16,590	15,467	16,107	16,366
Tar and pitch.....	65,114	140,079	84,694	122,602
Tea.....	21,761	19,683	15,889	15,964
Tobacco, and manufactures of.....	103,274	114,830	77,948	86,499
Wine.....	77,563	75,396	65,122	71,629
Woods.....	3,077,660	3,268,943	1,562,843	1,660,741
Wool.....	52,313	52,890	46,104	46,763
Yarn.....	76,808	75,732	36,022	36,439

Purchases from the United States.

The principal articles of import into the Netherlands from the United States during 1910 and 1911 are shown in the following table, in short tons:

Articles.	1910	1911	Articles.	1910	1911
Breadstuffs:	Tons.	Tons.	Provisions:	Tons.	Tons.
Corn.....	159,260	198,277	Lard.....	11,330	32,593
Flour.....	65,288	89,195	Meats.....	1,540	3,237
Wheat.....	77,527	160,602	Tallow, etc.....	7,538	7,998
Cotton, raw.....	6,195	19,023	Seeds.....	2,422	797
Fruit.....	10,238	4,163	Tobacco and cigars.....	13,016	19,275
Oils:			Woods.....	8,792	10,659
Cottonseed.....	18,014	20,428			
Petroleum.....	273,080	407,753			
Other.....	64,191	67,272			

As will be seen from the foregoing table practically every item entering into the import trade from the United States shows an increase in the receipts compared with 1910.

Increased Shipping—Merchant Marine.

The Dutch shipping and shipbuilding interests were prosperous during 1911 and the prospects for the present year are good. The mercantile fleet did not show the increase in the number of its ships that might have been expected. This was partly due, however, to the large number of old vessels disposed of during the year, which numbered 20, of 37,457 tons, against 27 steamers, of 89,231 tons, added to the fleet. The principal companies which added to their tonnage were as follows: Nederland Steamship Co. (Amsterdam-East Indies), 5 vessels, of 31,601 tons; Rotterdam Lloyd (Rotterdam-East Indies), 4 steamers, of 1,408 tons; Navigation & Coal Co. (Netherlands-England), 2 steamers, of 2,843 tons; Ocean Steamship Co. (Amsterdam-East Indies), 2 steamers, of 8,998 tons; and Indian Lloyd (Rotterdam-Bombay, a new line established in 1911), 4 steamers, of 16,509 tons.

That those interested in the Dutch merchant marine foresaw bright prospects in the near future was manifested by the large number of orders for steamers given by the steamship companies during last year, as follows: Holland America, 3 steamers, of 52,000 tons; Rotterdam Lloyd, 6 steamers, of 40,000 tons; Royal Dutch Lloyd, 2 steamers, of 28,000 tons; Nederland Steamship Co., 4 steamers, of 27,000 tons; Royal Packet Co., 6 steamers, of 16,500 tons; and other companies, 20 steamers, of 49,700 tons, making a total of 41 steamers, of 213,200 tons. Of this total, 29 steamers with a capacity of 100,500 tons are being constructed in the Netherlands. The capacity of the Dutch shipyards is being increased to meet the increased output. There are at present two slipways of 600 feet in length being constructed at Flushing, on which steamers up to 16,000 tons can be built.

BRITISH SILK EXHIBITION.

[From Consul General John L. Griffiths, London.]

The British Silk Exhibition will be held at Princess Skating Club, Knightsbridge, London, S. W., under the auspices of the Silk Association of Great Britain and Ireland, June 5 to 19. The offices of the exhibition are at 3-4, Newgate Street, London, E. C.

NEW STEAMER SERVICES.

[From Consul Louis Goldschmidt, Nantes, France.]

New Steamer for the Havre-New York Run.

The new passenger steamer of the Compagnie Générale Transatlantique, *La France*, built at St. Nazaire, has the following dimensions: Length, 712 feet; width, 75 feet; draft, 29 feet; gross tonnage, 24,800; net tonnage, 8,300. Eight turbines, developing 40,000 horsepower, give an average speed of 23 knots. The crew will number 587, including civil employees and physicians, and accommodations are provided for 1,885 passengers—535 first-class, 442 second-class, 184 third-class, and 724 immigrant.

A certain importance is attached to the fact that *La France* went to Brest to make the official trials instead of to Havre as has been the custom. It is rumored that the port of Havre is not deep enough to accommodate such large vessels and that the Compagnie Générale Transatlantique is studying the possibility of making of Brest the home port of their American lines. Brest has perhaps the largest natural harbor in Europe, with a constant depth of water of over 140 feet, and is nearer North America than Havre by about a day.

[From Acting Consular Agent James Murison, Almeria, Spain.]

Direct Almeria-New York Service.

The Fabre Line has arranged for a monthly boat to call at Almeria for cargo and passengers to the United States. The first steamer left this port on March 24 direct for Providence and New York. Through tickets and combined freight rates are in force for Cuban and Canadian business, with combined ocean and railway rates for passengers going to the Pacific coast or points in the Southwestern and Southern States.

Emigration to South America has been of considerable importance for some years, and it is expected that a similar flow will now take place to the United States. Emigrants to the number of 8,732 left this port during the year 1911. It is also hoped that with the establishment of direct communication the trade between the United States and Almeria, which has hitherto been small with the exception of grape exports, will show some increase.

[From Consul F. T. F. Dumont, Guadeloupe, French West Indies.]

Improved Guadeloupe Connections.

An important announcement is made by the Compagnie Générale Transatlantique, changing the sailings of the boats of this line.

Beginning April 17 a boat will leave St. Nazaire, France, every fourth Wednesday for Colon, Panama, via Guadeloupe, Martinique, Venezuela, and Colombia. A boat will leave Bordeaux, France, beginning May 1, every fourth Wednesday, for Colon, calling at Santander, Spain, and proceeding via Guadeloupe, Martinique, Trinidad, Venezuela, and Colombia. The return schedule to France is altered to correspond. This takes the place of the former twice-a-month schedule and increases the service between France and the countries mentioned two trips each way per year.

The monthly steamer service maintained between Martinique and Haiti, via Guadeloupe, St. Thomas, Porto Rico, and Santo Domingo, which connects at Pointe à Pitre, Guadeloupe, northbound, with the

St. Nazaire-Colon boat, is changed to a round trip each four weeks, increasing this service by one round trip a year.

The time from France to Guadeloupe is 11 days, and the new schedule gives Guadeloupe a steamer every two weeks each way instead of twice a month.

[From Consul Charles M. Hathaway, Jr., Puerto Plata, Dominican Republic.]

Change in Dominican Steamer Service.

Beginning with April, 1912, the itinerary of the French Line service between France and the island of Haiti (see Daily Trade and Consular Reports, Jan. 13, 1912) will be changed by making Bordeaux the European terminus for passengers and by the omission of St. Thomas. Connections for the ports formerly reached through St. Thomas will now be made at Port au Prince. The change will shorten the round voyage from Havre to Havre about three days.

Additional Colombian Ports of Call.

The United Fruit Co. announces a new Colombian fast freight and passenger service. Commencing April 24 the vessels employed on the New York-Santa Marta run will also call at Cartagena and Sabanailla (Puerto Colombia), affording a weekly service to and from those Colombian ports.

INTERNATIONAL DRY-FARMING CONGRESS.

[From Consul General John G. Foster, Ottawa, Canada.]

The Seventh International Dry-Farming Congress is to be held at Lethbridge, Alberta, Canada, October 21 to 26, 1912. During the same week there will be an international exposition of dry-farmed products, farm machinery, and labor-saving devices for the home and farm sanitation. There will also be held at the same time the Second Annual Convention of the International Conference of Agricultural Colleges and Experiment Stations, and the Second Annual Convention of the International Congress of Farm Women. There will be a conference on soil, tillage, and machinery, one on crops and breeding, one on agricultural forestry (or forestry as it pertains to the farm), one on live stock and dairying, one on agricultural education, one on farm management, and one on scientific research as it relates to agricultural subjects. Two hundred acres will be available for soil-tillage demonstrations in connection with the machinery exhibit. The secretary-treasurer, Mr. John I. Burns, invites correspondence for further information.

Gain in Tampico's Declared Exports.

Consul Clarence A. Miller reports that declared exports from the Mexican port of Tampico to the United States during the first three months of 1912 showed the remarkable gain of \$732,204 over the corresponding period of 1911, the totals being respectively \$827,000 and \$94,796. The principal articles in the March, 1912, quarter were: Hair, \$1,049; hides, \$28,482; honey, \$4,222; chicle, \$19,168; coffee, \$8,084; garlic, \$7,233; hemp, \$1,118; ixtle, \$63,164; onions, \$5,882; sarsaparilla, \$13,331; crude oil, \$668,058.

FOREIGN MARKETS FOR HORSESHOE NAILS.

[From Vice Consul Charles B. Henderson, Johannesburg, South Africa.]

Swedish Nails Popular in the Transvaal.

It is estimated that over 90 per cent of the horseshoe nails imported into this district are made by one Swedish firm [name on application to Bureau of Manufactures]. The nails of this make are a little heavier and stronger than others which have been introduced here, and it is claimed that they are more serviceable and can be driven into a hard hoof without bending. They are also cheaper than the nails offered by English and American manufacturers.

Racing plate nails are put up in 1-pound paper boxes, packed in wooden cases of 25 pounds, and sell for 43 cents a pound. The regular horseshoe nails are packed in wooden boxes of 25 pounds net, and sell for the following prices per box: No. 4, \$4.38; No. 5, \$3.65; No. 6, \$3.28; No. 7, \$2.98; No. 8, \$2.68; No. 9, \$2.49; No. 10, \$2.43; No. 11, \$2.37; No. 12, \$2.31. The above prices are those charged by the importers to farriers, who are allowed a 5 per cent discount and 30 days credit. The nails generally used for ordinary shoeing here are Nos. 4, 6, 8, 10, and 12. The customs duty is 3 per cent ad valorem, those of British make being admitted free.

[From Consul General James A. Smith, Genoa.]

Horseshoe Nails Made in Italy.

Large quantities of horseshoe nails are made in Italy, at Crema, in Lombardy, and at Pinerola and Bard, in Piedmont. Some Swedish nails are imported, but this importation is diminishing owing to the high customs duty and to the growth of the home industry, which is able to supply a large part of the home demand and export small quantities. From \$58,000 in 1908, the imports fell to \$25,000 in 1910. The exports also fell from \$55,000 in 1908 to \$26,000 in 1910.

Swedish nails are received in cardboard boxes of 5 kilos (11 pounds) gross. The prices per quintal (220.46 pounds) of Swedish and Italian nails are shown in the following table:

	Swedish.	Italian		Swedish.	Italian.		Swedish.	Italian.
No. 4.....	\$17.37	\$16.98	No. 7.....	\$11.58	\$13.50	No. 9.....	\$10.42	\$12.74
No. 5.....	15.44	15.82	No. 7½.....	11.38	13.50	No. 9½.....	10.23	12.74
No. 6.....	13.51	14.67	No. 8.....	11.00	13.12	No. 10.....	10.04	12.74
No. 6½.....	12.54	14.25	No. 8½.....	10.80	13.12			

To the prices of the Swedish nails must be added \$3.18 per 220.46 pounds for import duty on the nails and \$13.51 per 220.46 pounds for import duty on the cardboard containers. In lots of 8 tons the Italian manufacturers grant a discount of 25 per cent. [A list of the leading dealers in horseshoe nails in Genoa may be obtained from the Bureau of Manufactures.]

Russian commercial commission.—Consul General W. Stanley Holis, of Beirut, reports that the Russian commercial commission which is touring the Levant and Near East in the interests of Russian trade extension visited that Syrian port during the week of March 18.

RUSSIAN COMMERCIAL NOTES.

[From Consul General John H. Snodgrass, Moscow.]

Improving the Dnieper.—In the near future, it is said, the project for building locks and dams for the Dnieper will be realized; \$16,000,000 will be spent, and it will require about six years to complete the work.

Railway order.—The Russian Minister of Railways has requested the Council of Ministers to sanction a grant of \$13,000,000 for acquiring rolling stock for the Amur Railway and also for completing an order for 200 locomotives.

Russian farm machinery.—The Russian Baltic Car Co. is perfecting a sheaf binder of its own design that is expected to be an improvement over similar American machines. The American binder is said to crush the grain and to be unsuited to Russian agriculture. The factory, which is seriously attempting to compete in the Russian market with the agricultural machinery imported from Austria, Germany, Great Britain, and the United States, manufactures large steam automatic thrashers of the American type as well as more simple implements, such as plows, drills, sorters, horse thrashers, etc.

Organizing chambers of commerce.—In the great majority of Russian cities chambers of commerce do not exist. Recently, through the influence of the Russian Government, boards of trade have been planned, and it is believed that before the end of the year many such organizations will have been established, not only in the larger cities but also in the provincial towns, where an industrial awakening of real magnitude has developed during the past few months. To encourage the organization of such bodies, the Minister of Commerce and Industry has offered the following suggestions for the upbuilding of the proposed chambers: (a) The unification of all the chambers, so that there will be a real national board of trade; (b) close attention to the requirements of domestic commerce and industry; (c) the regulating, maintaining, and subsidizing of those institutions that are considered useful to commerce and industry.

STEEL PENS IN THE TROPICS.

[From Consul Milton B. Kirk, Manzanillo, Mexico.]

Experience in several tropical countries shows that the ordinary steel pen used in the United States rusts very quickly during the wet season or at a seaport, which renders it practically useless. Bronze or brass pens, or those coated with bronze, do not seem to be thus affected. Ink deteriorates very quickly in tropical climates and often has the consistency of gum. On the ordinary steel pens this aids the rust and is hard to wipe off if left for a short time. With the bronze or brass pen or with a pen coated with bronze, the coated ink is easily wiped or burnt off.

In order to avoid this rusting of steel pens, a box containing the usual 1 gross might be divided in a way that would expose only 1 dozen at a time, or pens might be packed in oiled paper envelopes holding a dozen each and then placed in the usual cardboard boxes. It is not believed that the additional cost of packing would be enough to affect the retail price, and the pens would be more serviceable in tropical climates, thus aiding their sale.

OLD SHEFFIELD PLATE.

[From Consul Charles N. Daniels, Sheffield, England.]

With further reference to the articles on "old Sheffield plate" in Daily Consular and Trade Reports for February 13, 1912, it may be stated that it is not manufactured at the present time.

The method formerly used was to braze or weld a thin sheet of silver on either side of a thicker sheet of copper, and then to roll this combined metal to a sheet of the thickness required, which would result in a sheet of copper coated on both sides with an actual surface of silver. The process of electroplating is much cheaper and quicker, and has superseded the old method to such an extent that articles manufactured by the old process would now cost quite as much as the same articles in sterling silver.

Genuine "old Sheffield plate" has an added value on account of its antiquity. In some parts of England unscrupulous manufacturers do not hesitate to produce copies of old patterns by the electroplating process and then palm them off on unsuspecting purchasers as genuine. The Cutlers Co., of Sheffield, successfully prosecuted two leading dealers in the United Kingdom for selling this "imitation" ware as "old Sheffield plate," and it has now been decided by the courts that the term "old Sheffield plate" means articles made from metal consisting of silver fused upon copper and not copper electroplated, and that any dealer applying the term "old Sheffield plate" to an article made in any other way than by the fusing process is guilty of fraudulent description and may be proceeded against.

There is any quantity of electroplate made in this city which would be entitled to the name of "Sheffield plate." The decisions of the courts referred to have particular reference to the term "old Sheffield plate," which to-day is the only safe description under which to buy plate if one expects to secure genuine examples of the old process.

LEVANTINE BUSINESS NOTES.

[From the Near East.]

Reconstruction of Constantinople's Burned Area.

The Ottoman Council of Ministers has authorized the Mayor of Constantinople to issue a loan of \$1,700,000 for reconstructing a part of the Stamboul quarter destroyed by fire.

Farm Machinery for Egypt's Ruler.

The Khedive of Egypt lately purchased a considerable quantity of new machinery for use on his Anatolian estate. This machinery has been shipped from Egypt for Dolman by a well-known Leeds firm. His Highness has also transported to Dolman a large number of horses and some 150 fellaheen laborers.

The Drainage of Swamps in Greece.

We give the following particulars in answer to a number of inquiries that we have received from the readers of the Near East. There are about 35 swamps and swampy lakes to be drained, all in different districts of Greece, from north to south, and some in the Aegean and Ionian Islands. The expenditure is estimated, for each swamp separately, from 5,000 to 800,000 francs (franc=19.3 cents). The latter figure is for the drainage of the swamps near Vonizza; other drainages are in Halkis, the island of Negroponte, in Erretria, in Theesaly, Attica, Laconia, Phokis, Arcadia, and Argolis, varying from 10,000 to 60,000 francs, and in other districts from 5,000 to 10,000 francs. We understand that the money is to be deposited, if not already deposited, in the National Bank of Greece.

BUREAU OF MINES PUBLICATIONS.

Bulletin 10. Use of permissible explosives. 1912. 34 pp. 5 pls.

Bulletin 23. Steaming tests of coals and related investigations, September 1, 1904, to December 31, 1908. 1912. 380 pp. 1 pl.

Technical Paper 8. Methods of analyzing coal and coke. 1912. 21 pp.

Technical Paper 10. Liquefied products from natural gas; their properties and uses. 1912. 23 pp.

Technical Paper 11. The use of birds and mice for detecting carbon monoxide after mine explosions and fires, by G. A. Burrell. 1912. 14 pp.

Bulletin 34. Tests of run-of-mine and briquetted coal in a locomotive boiler. 32 pp. Reprint of United States Geological Survey Bulletin 412. Copies will not be sent to persons who have received Bulletin 412.

The Bureau of Mines has copies of these publications for free distribution, but can not give more than one copy of the same bulletin to one person. Requests for all papers can not be granted without satisfactory reason. In asking for publications please order them by number and title. Applications should be addressed to the Director of the Bureau of Mines, Washington, D. C.

AMERICAN BICYCLES IN BRITISH COLUMBIA.

[By Consul General David F. Wilber, Vancouver.]

Formerly, most of the bicycles sold here were manufactured in the United States. Later, for some reason, English machines supplanted them and these have been replaced in turn by Canadian bicycles, which now make up the largest number sold here. With the improvement of roads and streets that is going on in this district and city, there is a very good market here for bicycles; and there seems to be a good opportunity for American dealers, by obtaining local representatives and making a vigorous campaign, to sell a much larger number of machines than they do at present. If American manufacturers expect to gain their proper share of this business, they must not rely upon jobbers, but must have direct representation and must carry on a vigorous sales policy.

SUIT-CASE PRICES IN ENGLAND.

[From Consul General John L. Griffiths, London.]

With reference to a possible market in the British Isles for suit cases, the following local retail prices are given:

Fiber suit cases, covered in green canvas, with eight leather corners and two double-action locks, size 24 by 15½ by 7½ inches, \$5.23; 26 by 15½ by 9 inches, \$6.33.

Covered in green canvas, lined jean, two-slide nozzle locks, eight capped leather corners, size 20 by 14 by 6 inches, \$3.28; 22 by 14½ by 6 inches, \$3.58; 24 by 15 by 7 inches, \$4.07; 27 by 15½ by 7 inches, \$4.43.

Extra wide fiber suit cases, size 27 by 16½ by 8½ inches, \$7.66; 30 by 17½ by 9½ inches, \$8.63; with eight molded leather corners, lined Holland, two-slide nozzle locks, and center clip.

SEALING FREIGHT CARS IN ENGLAND.

[From Consul General John L. Griffiths, London.]

Car seals are not in use on British railroads as in the United States. A very large proportion of the freight cars in this country are open, and when loaded are covered with a tarpaulin sheet tied to stanchions fitted on the cars. With reference to closed cars, the usual custom is to bolt and lock the door and then to fasten it with a movable iron bar (running the length of the car), which is then strongly secured by padlock. In what little sealing is done, lead is used. In the case of very valuable freight or bullion, an additional protection is provided by one or more officials traveling inside the car.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 611. Gunboat.**—Proposals for constructing by contract gunboat *No. 19* will be received at the Navy Department, Washington, D. C., until July 1, 1912. A circular of requirements for said vessel is now ready and plans and specifications will be ready for distribution among prospective bidders after May 1. Forms of proposal and contract may be had on application to the department after June 1.
- No. 612. Screws and bolts.**—Proposals, in duplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until May 1, 1912, for furnishing and delivering to the Signal Corps 5,000 gross assorted screws and bolts, or such part thereof as may be required from May 1, 1912, to April 30, 1913, to be ordered from time to time as the necessities of the service may require. (Proposal No. 580.)
- No. 613. Frame buildings and water and sewer extensions.**—Sealed proposals will be received at the Indian Office, Washington, D. C., until May 18, 1912, for furnishing materials and labor for a frame schoolhouse and frame quarters and installation of water and sewer extensions at the Tohatchi Indian School, New Mexico, in strict accordance with the plans, specifications, and instructions to bidders, which may be examined at the Indian Office, the offices of the Supervisor of Construction, Denver, Colo.; the Builder and Contractor, Los Angeles, Cal.; the Journal, Albuquerque, N. Mex.; the Arizona Gazette, Phoenix, Ariz.; the United States Indian warehouses at Chicago, Ill., St. Louis, Mo., Omaha, Nebr., and San Francisco, Cal., and at the Navajo School. For further information apply to the superintendent of the Navajo Indian School, Fort Defiance, Ariz.
- No. 614. Supplies for Life-Saving Service.**—Sealed proposals will be received at the office of General Superintendent, United States Life-Saving Service, Treasury Department, Washington, D. C., until May 9, 1912, for furnishing supplies required for use of the Life-Saving Service for the fiscal year ending June 30, 1913; the supplies to be delivered at such points in New York City, Grand Haven, Mich., and San Francisco, Cal., as may be required, and in the quantities named in the specifications. The supplies needed consist of beds, bedding, and furniture, brooms and brushes, crockery, hardware, household goods, lamps, lanterns, etc., lubricants and preservatives, medicines, etc., ship chandlery, stoves, etc., tools, and miscellaneous articles, all of which are enumerated in the specifications attached to the form of bid, which may be obtained upon application to the office of the General Superintendent, Washington, D. C., or to the Assistant Inspector of Life-Saving Stations, 507 Hudson Street, New York City, Superintendent Twelfth Life-Saving District, Grand Haven, Mich., and Superintendent Thirteenth Life-Saving District, 311 Customhouse, San Francisco, Cal.
- No. 615. Supplies for arsenal.**—Sealed proposals, in triplicate, will be received at the Rock Island Arsenal, Rock Island, Ill., until May 17, 1912, for furnishing hardware, leather, steel, iron, cleaning materials, oils, paints, chemicals, materials for heating and lighting, paper, lumber, etc., during the fiscal year ending June 30, 1913. Information furnished upon application to the commanding officer, Rock Island Arsenal.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8707. Electric automobiles and appurtenances.**—An American consul in a South American country has requested to be supplied with catalogues of electric automobiles and appurtenances, such as transformers, etc., as also the price of same f. o. b. New York City. Several inquiries have been received, and it is possible that sales may be effected.
- No. 8708. Hand and power baling machines.**—A business firm in the West Indies informs an American consular officer that it desires literature and prices on hand and power baling machines to be used in connection with the preparing of sugarcane leaves and tops for the local market.

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CHILD-LABOR LEGISLATION.

GREECE.

[From American Minister George H. Moses, Athens.]

The last session of the Greek National Assembly enacted a law which forbids the employment of children under 12 years of age in mills, factories, mines, on buildings or other outdoor work, in messenger or transportation service, in shops, restaurants, coffee houses, wine shops, bakeries, or hotels; provided that children of more than 10 years may be employed by parents or guardians in domestic industries which are not dangerous or where machinery is not used, but in no case shall a child's employment be such as to prevent its regular attendance at the primary schools, or for more than three hours daily. In orphanages or philanthropic institutions where trades are taught the limit to a child's daily work shall be three hours.

After five years these occupational restrictions will be applied also to children between 12 and 14 years and to those who have not completed their attendance at the primary schools. For such children the day's work will be limited to 6 hours with 10 hours for children under 18 years, who will not be permitted, however, to work more than 8 hours on Saturdays or legal holidays.

The hours of employment are to be reckoned from the time of entering the establishment until the moment of exit. There must be at least one recess during the day of not less than 30 minutes for children whose labor is limited to 3 hours daily, and of not less than 2 hours for young persons and women, except on Saturdays, when 1 hour will be given. These recesses must be granted to all employees at the same time, except in mines or where furnace fires must be maintained, and no continuous employment for more than 6 hours without a recess is permitted.

Restrictions as to Hours and Occupations.

Children under 16 years and women are not to be employed on Sundays or holidays in factories, mines, shops, restaurants, bakeries, etc., nor shall children under 18 years or women be employed in factories, in construction or like work, or in shops before 5 o'clock

in the morning or after 9 o'clock at night. In case of rush of work, by permission of the prefect of the district young persons and women may be permitted to work 12 hours daily on all working days except Saturday for a period not exceeding four months in the year, and by royal decree issued at the instance of the appropriate ministry women of more than 18 years may work at night if necessary.

Without special license children under 14 years shall not sell articles in the streets, nor shall any person under 16 years sell in the streets earlier than 5 o'clock in the morning nor later than 9 o'clock in the evening. Newsboys of 12 years or more are excepted from these provisions. Without special police license no child under 14 years shall be employed as an artist or otherwise in theaters. Women and children under 15 years shall not be employed in mines. Pregnant women shall not be compelled to work for 8 weeks before and 4 weeks after confinement, and their absence during such period shall be counted as leave without liability to loss of situation.

Children under 16 years shall not be employed in factories nor in messenger or transportation service unless they present a medical certificate that they are in sufficient health for such employment, and by royal decree children and women may be prohibited from employment at places where their morals will be endangered or where the work is too heavy for them.

ENGLAND.

[From Consul Augustus E. Ingram, Bradford.]

Child labor, or the half-time employment of children in the textile factories of Yorkshire, England, has recently been the subject of much discussion owing to the action of the education committee of the county council of the West Riding of Yorkshire which has passed by-laws restricting such labor.

Previously a child between 12 and 14 years of age could obtain partial exemption from school attendance—or become a "half timer," in common parlance—provided he had made 300 school attendances per annum for five years at not more than two schools; the new by-laws provided that a certain standard of efficiency (Standard VII) must be attained before a certificate of exemption would be granted. It is claimed by the chambers of commerce at Bradford and Halifax that this restriction would amount to abolition of half-time labor, as only in exceptional circumstances has a child reached the seventh standard before 14 years of age.

As these new regulations affected only the urban districts in the West Riding (that is to say, exclusive of the municipal boroughs having a population of over 10,000, and urban districts having a population of over 20,000) great complaint was made not only of the inequality of treatment and the consequent disadvantage of families residing in certain sections, which led to their changing their place of abode, but also of the conflict between these local regulations and the factory acts which permit half-time labor. The result has been that at the March meeting of the West Riding county council the by-laws were amended so as to permit partial exemption for children between 13 and 14 years of age if they have made 350 school attendances per annum for five years at not more than two schools.

Number of Half-Timers—Juvenile Employment Bureau.

The importance of this subject is evident from the fact that the total number of half-timers in England is estimated at 37,403, there being 21,248 in Lancashire and 9,265 in Yorkshire. It is believed, however, that half-time labor in this country is doomed, and that eventually national legislation will be introduced abolishing the system.

A return has recently been issued by the Bradford education committee showing that in 1911 there were 512 children under 14 years of age in Bradford who, having been in the seventh standard for six months and having passed the labor examination at the end of that period, were in full-time employment. Under the factory acts, however, these children may not be employed in a factory or workshop but may take full-time employment in any other occupation.

The Bradford education committee has also recently adopted a scheme, under the provisions of the education (choice of employment) act, 1910, to assist boys and girls under 17 years of age in the choice of suitable employment. A subcommittee consisting of members of the education committee and representatives from the Chamber of Commerce, the Chamber of Trades, Trades and Labor Council, the local branch of the National Union of Teachers, and the Guild of Help, will be appointed and a central office established in the city under the name of the Bradford Juvenile Employment Exchange and Bureau. An officer will be regularly available at the bureau to interview applicants for employment and to confer with the officer in charge of the juvenile branch of the Labor Exchange before the names of applicants are submitted to employers.

School-Teachers to Aid—The Committee's Work.

Among other provisions it is proposed that the head teachers of the day schools shall assist by furnishing the subcommittee with information as regards the employment obtained by each pupil leaving school and the character, conduct, and capabilities of the pupil. If any pupil has not within three months before leaving obtained suitable employment the head teacher will forward an application to the subcommittee.

The four main points to be considered by the employment committee in organizing its work are summarized under the following heads: (1) The system of obtaining and keeping registers of the children; (2) arrangements for giving general advice and information to parents and children with regard to the choice of employment; (3) placing children in particular vacancies; (4) organization for keeping in touch with boys and girls who need particular attention. The possibility of utilizing voluntary workers is discussed, and it is suggested that the most desirable method in Bradford is that this shall be done by establishing voluntary district committees linked up with the juvenile employment subcommittee.

Wool-shortening machine.—A supplementary report from Consul Benjamin F. Chase, of Leeds, describes the new British machine for shortening wool that was briefly mentioned in Daily Consular and Trade Reports on September 2, 1911. The consul's report and accompanying samples of cloth will be loaned to interested firms by the Bureau of Manufactures.

SIAMESE TRADE NEWS.

[From Vice Consul General Carl C. Hansen, Bangkok.]

Importation of Arms and Ammunition Limited.

The importation of arms and ammunition in quantities by dealers is prohibited by the Siamese Government. Special individual permits must be secured for each person desiring such goods, and only goods for which these permits have been secured may be brought in. The firm or agent usually carries samples from which the buyer selects the model desired. Then he secures a permit for himself and the dealer imports goods to fill the order.

Mannlicher and Mauser rifles and Browning pistols may be brought in personally only by Europeans, and they are required to give a guaranty that such arms will be for strictly personal use and will not be disposed of except by special consent of the Siamese Government.

The total imports of firearms into Siam during the fiscal year ended March 31, 1911, were valued at \$13,659, of which the United States supplied only \$27 worth. Of total imports of ammunition and explosives valued at \$21,049, the United States furnished \$11 worth. The United Kingdom and Germany supplied the greater part of this trade.

Sporting Goods and Games.

With the rapid extension of a modern school system and the growing interest in games and sports of all kinds, especially badminton, football, and tennis, there has come a growing demand for sporting goods and games in Siam. Up to 1907 the imports of these goods were not of sufficient importance to warrant a separate classification in the customs returns, but in the fiscal year ended March 31, 1908, they amounted to \$13,700; in 1909, to \$12,187; in 1910, to \$13,724; and in the fiscal year 1911, to \$15,793. The bulk of these goods come from the United Kingdom, which last year supplied \$13,437 worth, against \$483 worth from the United States. It is probable that interest in popular educational card games could be developed, especially if these were printed in Siamese characters.

Hardware and Cutlery—Lamp Trade.

The share of the United States in the hardware and cutlery trade of Siam is still small, amounting to \$23,578 for the fiscal year ended March 31, 1911, but it shows a fair advance when compared with that of five years ago, when it amounted to \$5,001. The total imports of hardware and cutlery for 1910-11 amounted to \$401,123, while the yearly average for the past five years was \$458,059. Of the 1910-11 imports Germany supplied \$91,655, the United Kingdom \$72,934, and Austria-Hungary \$38,750. The trade of the United States in this line has been held back by the lack of American business houses in Siam to push American goods, and perhaps, also, to the failure of American manufacturers to supply special articles which the Siamese trade demands, such as betel sets and utensils for the table, kitchen, and toilet. Manufacturers in other countries have made exact imitations of such articles and have built up a large trade. Modern articles of hardware are steadily supplanting the ancient models, however, and the trade of the United States has gradually been extended. At present all articles of hardware and cutlery find a good market here.

Ordinary kerosene lamps are used in most Siamese houses outside of Bangkok, as only that city has electric lighting and coal is too expensive for use in producing illuminating gas. The greatest demand is for wall lamps, which are used in the thousands of houseboats which line the rivers and canals of Siam, and in the homes of the peasants. Such lamps sell at 25 to 50 cents each, but nearly every kind of lamp finds a sale in Siam. Only the most ordinary lamps are made in this country by the Chinese tinsmiths, the rest being imported. The following table shows the value of the imports of lamps and parts in the fiscal years ended March 31, 1910 and 1911:

Countries.	1909-10	1910-11	Countries.	1909-10	1910-11
United States.....	\$44,026	\$27,144	Hongkong.....	\$12,636	\$17,316
United Kingdom.....	26,096	15,873	All other countries.....	10,085	6,219
Germany.....	19,624	15,352			
Japan.....	14,655	21,334	Total.....	157,146	136,741
Singapore.....	30,094	33,503			

Tobacco and Beverage Trade.

Most of the tobacco produced in Siam, about 3,000,000 pounds a year, valued at \$500,000, is consumed at home, the exports last year amounting to only 10,267 pounds, most of which went to Hongkong. The tobacco leaf grown here is said to be of peculiarly fine texture and would probably displace foreign tobacco in the local markets if it were cured by modern methods. At present the leaves are kept in the dark until partly dry, then folded lengthwise one upon another, cut into cross sections, and exposed to the sun for a day or two, after which they are ready for consumption. One of the chief uses for tobacco here is for cigarettes. A considerable quantity of native tobacco is mixed with areca nut and betel leaf and used for chewing, the imported tobacco never being used for this purpose.

The imports of tobacco and its manufactures into Siam for the fiscal year ended March 31, 1911, amounted to \$407,841, against \$412,305 for the previous year. These imports consisted of cigars, \$78,311; cigarettes, \$159,760; and tobacco, \$169,770. The United States supplied \$96,942 worth of cigarettes and \$726 worth of tobacco, and the Philippines sent cigars valued at \$11,194, against \$5,731 in 1909-10. Tobacconist's stores to the value of \$26,796 were imported in 1910-11, against \$22,825 in the previous year, the United Kingdom and Austria-Hungary furnishing the largest shares.

Instead of being used for a beverage, the leaves of the tea plant, after being fermented, are rolled into balls, one of which is placed in the hollow of the cheek and allowed to remain there until the soluble contents have been exhausted by the saliva. This use of tea is common in northern Siam. The tea plant is cultivated to only a small extent, but is found wild on hill slopes. In lower Siam, tea drinking is indulged in to a considerable extent, especially among the Chinese.

The tea imports into Siam in the fiscal year 1910-11 amounted to 10,665 piculs (1,422,000 pounds), valued at \$291,915, nearly all of which came from China and Hongkong. The imports of beer, wines, and spirits during 1910-11 were valued at \$524,282, against \$537,530 for the previous year. The only alcoholic liquor produced in Siam is arrack, and its production and sale is regulated by the Government.

China and Glassware—Stationery and Photographic Supplies.

The imports of china and earthenware into Siam dropped from \$393,721 in 1909-10 to \$338,306 in 1910-11, of which amount \$316,462 came from Oriental ports. The imports from the United States amounted to \$122. Despite the decreased total, the imports of the finer grades of china showed a gain of \$10,019. Glass and crystal ware imports amounted to \$124,874, a decrease of \$6,733 from those of the preceding year. Hongkong, the United Kingdom, Germany, and Singapore led in this trade, the share of the United States being \$1,275. The production of glass and crystal ware in Siam is confined to a few Chinese, who make a small amount of the commoner goods. No attempt has been made to compete with foreign wares.

All of Siam's supplies of stationery come from abroad, and with the development and extension of the school system the demand will increase yearly. In 1909-10 the United States furnished \$2,516 of a total of \$126,569 worth of these goods imported, and in 1910-11, \$2,335 out of a total of \$144,976. The imports of cameras and photographic materials, none of which came from the United States, dropped from \$58,054 in 1909-10 to \$38,159 in 1910-11.

Electrical Goods and Apparatus.

Electrical goods are not manufactured in Siam, and Bangkok is the only city in this country which has an electric light and power plant. There is a market here for electric fans, lighting fixtures, telephone apparatus, street-railway equipment, motors, cables, insulators, and a variety of similar goods. The portion of this trade supplied by the United States increased from \$1,868 out of total imports of \$43,394 in 1906-7 to \$23,733 out of \$143,410 in 1909-10, but dropped to \$16,232 out of \$167,279 in 1910-11. In the latter year the United Kingdom led in this trade, with Germany second, and the United States third.

Perfumery and Soaps—Woolen Goods.

Perfumery is extensively used in Siam, and eau de Cologne, Florida water, scented hair lotions and oils, face creams, and cosmetics are in constant demand. German, French, and English firms send out salesmen every year or six months to look after this trade. Few, if any, American perfumes are found on the Siamese market. The people here prefer jasmine, rose, and violet scents. No definite statement can be made of the amount imported, as the customs give no separate classification for these goods.

Although there is now a soap factory in Bangkok, the imports of soap in 1910-11 amounted to \$93,909, an increase of \$7,686 over the preceding year. The United Kingdom supplied \$75,239 worth, Germany \$4,522, and the United States \$403. Certain well-known brands of American soaps are in demand, but they can not be obtained in most of the local stores, and goods from other countries are substituted.

Neither wool nor woolen goods are produced in Siam, and the demand for these goods is limited mainly to the colder months, October through January in northern Siam and November through January in the southern part. The chief demand is for flannels, woolen blankets, shawls, and piece goods. It appears from the customs returns that no attempts to enter the Siamese markets have been made by American firms.

Marine Products—Coffee Growing—Live Stock.

Marine products form an essential part of the food supplies of the people of this country, especially in lower Siam, where the rivers and the Gulf of Siam contain an abundance of sea food, such as oysters, crabs, and turtles. Fish are less abundant in upper Siam, and large amounts are shipped from the south. It is said that the Siamese eat fresh or dried fish at every meal. Most of the fish are salted or dried. Besides supplying the home demand, the Siamese fisheries annually export about 22,000 tons to Singapore and Hongkong.

An attempt was made during 1911 to can the fish known by the native name of "pla too," but the project failed. This fish is well known in the Far East for its delicate flavor. A dried form of river fish called "pla heng" is said to rival Bombay duck in delicacy. In 1910-11 Siam imported canned salmon and sardines, and other fish not canned, valued at \$152,508.

Coffee growing, which has been an experiment by missionaries in Chantabon Province for some years, has now been taken up by the general population, and coffee planting is being rapidly extended. At present the yield is only 10,000 to 20,000 pounds a year, all of which finds a market in Bangkok, where the taste of this coffee is finding favor with many Europeans.

The following are recent live-stock statistics for the Kingdom: Bullocks, cows, and calves, 1,627,507; buffaloes, 1,527,738; horses and ponies, 57,647; elephants, 3,215. Most of the bullocks are bred by Indian traders in Siam and are shipped to Singapore for distribution to different parts of the Straits Settlements and the Malay States, where they are used as draft animals.

[Partial reviews of Siam's trade for the fiscal year ended Mar. 31, 1911, appeared in Daily Consular and Trade Reports for Nov. 25, 1911, and Feb. 5, 1912.]

IRON FENCES IN CANADA.

[From Consul F. M. Ryder, Rimouski, Quebec Province.]

Ornamental iron fences are seldom seen in this locality, probably due to the increased cost over the ordinary wood pickets, the material used in the construction of these fences being very reasonable in price.

A number of the farmers are gradually discarding the heavy fence rails which have surrounded their properties for decades and are erecting serviceable wire field fencing with attractive entrance gates; the wire is securely stapled to cross rails and substantial posts of white cedar, which are set 6 feet apart, as fences must be of sufficient strength to hold up under the heavy snowfalls of this region.

One of the many advantages of wire fencing is becoming so apparent in this section, at least, that the time is not far distant when municipalities will demand the removal of all rail or board fences along the public highways of the Province, for the reason that these form a barrier for drifting snows, and it is almost impossible to maintain a good winter road where they exist. It is customary to remove the rails in winter, leaving only the fence posts standing, but this work is not always attended to in season and, as a consequence, many of the country roads are rendered impassable from November until May.

There are several large concerns, located in this Province and also in New Brunswick, which manufacture wire fencing, poultry netting, etc.

MERGER OF CARLSBAD KAOLIN COMPANIES.

[From Consul Will L. Lowrie, Carlsbad, Austria-Hungary.]

Through the merger of four of the largest concerns operating kaolin mines and refineries in the Zettlitz (Carlsbad) district the entire deposit is now controlled by two firms. The Zettlitzer Kaolinwerke A. G. has increased its capital from 1,000,000 to 7,500,000 crowns (\$203,000 to \$1,522,500) in order to absorb three independent firms, and is in a position to control the market. Kaolin from the Bohemian deposits has been sold for some years under a trust agreement and the present price is 64 crowns (\$13) a ton in 10-ton lots.

The property owned by the Zettlitzer Kaolinwerke includes the refinery at Sodau, the largest on the Continent. In connection with the independent firm it has secured deposits at Spittengrun, near Carlsbad, which will be available for the next 50 years at the present rate of output.

Character of Zettlitz Kaolin.

The Zettlitz kaolin has been used in the ceramic industry for almost a hundred years. All of the 50 porcelain and earthenware factories in the district use large quantities, and the export to Germany, Russia, Italy, and the United States amounts to 38,000 tons annually. It is considered one of the best china clays in the world. The deposit is centered at the village of Zettlitz, 2 miles from Carlsbad. The first stratum, often several meters thick (meter=39.37 inches) and known as "wilder erde" or "schlicker" (mud), is not fit for industrial purposes, although geologically it is the oldest kaolin earth. The next stratum, 10 to 20 meters thick, is a white and brown earth formed in the Miocene and Diluvian periods. This is lost in the underlying granite. More than half of the crude material is removed in the process of refining; in fact, only about 40 per cent of pure china clay is secured. Its analysis is as follows: SiO_2 , 45 to 48 per cent; Al_2O_3 , 37½ to 40 per cent; H_2O , 13 per cent.

It is stated that the Zettlitzer Kaolinwerke may absorb the remaining independent concern in the district and that the price of raw and refined kaolin may be advanced materially. This would affect the cost of chinaware, of which \$730,000 worth was exported from the Carlsbad consular district to the United States last year.

Statistics of Industry.

The following figures regarding the kaolin industry, from the last yearbook of the Eger Chamber of Commerce, may be of interest:

In the district of the Eger Chamber of Commerce kaolin is mined in the Zettlitz-Carlsbad section, and also in the vicinity of Kaaden, Pomeisl, Poschitzau, Braunsdorf, and Wildstein. The world-famous Zettlitz-Carlsbad district alone produced about 170,000 tons of raw kaolin, and from that quantity 43,000 tons of refined product for the china industry, while an additional 8,000 tons was mined for the paper-manufacturing industry in 1910. Of the total amount, 30,000 tons A1 of refined kaolin and 8,000 tons A2 were exported, principally to Germany. The export to Germany increased 2,500 tons in 1910. First quality Zettlitz kaolin meets with no competition either at home or abroad. The mean price obtained for refined kaolin was 64 crowns (\$13) per ton f. o. b. Carlsbad in 10-ton lots.

The Kaaden district produced 36,000 tons of crude, or 10,000 tons of refined, kaolin in 1910. This is used in the manufacture of china and paper. Germany is the chief importer of this grade, and paid on an average 18 crowns (\$3.65) per ton f. o. b. Kaaden in 10-ton lots. The Wildstein district produced about 50,000 tons raw and 12,000 to 15,000 tons refined kaolin in 1910.

The best quality of kaolin comes from the Zettlitz district and receives the highest prices. This section is the largest producer in the district of the Eger Chamber of

Commerce. Of the 43,000 tons of refined kaolin produced 26,000 tons are produced by the Karlsbader Kaolinindustrie A. G. and Messrs. Zebisch & Pfeiffer, each firm contributing about the same amount. The porcelain works of Eduard Lorenz & Co. (Ltd.) not only manufacture raw kaolin, but built a large modern kaolin refinery in Dallwitz a. Eger in 1910 with a capacity of 9,000 tons per annum. This plant has been in operation since 1911.

It can be seen, then, that by far the greater part of the production of the Zettlitz district is in the hands of the firms which have just been amalgamated. There remains but one outside firm.

BRITISH IMPERIAL TRADE COMMISSION.

[From Consul General John L. Griffiths, London.]

The Royal Commission mentioned in Daily Consular and Trade Reports for April 15 as being appointed to inquire into the natural resources and improvement of trade of the British Empire is officially charged with the following duties:

To inquire into and report upon the natural resources of the Dominion of Canada, the Commonwealth of Australia, the Dominion of New Zealand, the Union of South Africa, and the colony of Newfoundland; and, further, to report upon the development of such resources, whether attained or attainable; upon the facilities which exist or may be created for the production, manufacture, and distribution of all articles of commerce in those parts of the Empire; upon the requirements of each such part and of the United Kingdom in the matter of food and raw materials, and the available sources of such; upon the trade of each such part of the Empire with the other parts, with the United Kingdom, and with the rest of the world; upon the extent, if any, to which the mutual trade of the several parts of the Empire has been or is being affected beneficially or otherwise by the laws now in force, other than fiscal laws, and generally, to suggest any methods consistent always with the existing fiscal policy of each part of the Empire, by which the trade of each part with the others and with the United Kingdom might be improved and extended.

It is understood that the commission will immediately enter upon its work. The appointment of this commission is another evidence of a purpose which has been so strongly manifested within the last two or three years to bring all parts of the British Empire into a closer and more effective commercial union. Still another evidence of this is the British Empire Commercial Congress to meet in London on June 11, as announced in Daily Consular and Trade Reports for April 16.

NEW GOVERNMENT PUBLICATIONS.

The following books may be had from the Superintendent of Documents, Government Printing Office, Washington, D. C., for the price affixed:

Wireless Telegraph Stations of the World, including shore stations, revenue cutters, and vessels of the Navy, corrected to January 1, 1912, consisting of 165 pages; issued by the Bureau of Steam Engineering, Navy Department. Price, 15 cents.

Geochemistry. Data of geochemistry (with bibliography) on water analyses; 782 pages; issued by the Geological Survey. Price, 55 cents.

National Monetary Commission reports, volumes 1 to 23, which comprise a complete review of banking, finance, and currency of the world. Cloth bound, \$45 per set.

Immigrants in Industries, Part 2—Iron and Steel Manufacturing. Prepared by Immigration Commission. Price, 55 cents.

Immigrants in Industries, Part 3—Cotton Goods' Manufacturing in North Atlantic States, and Part 4—Woolen and Worsted Goods—Manufacturing. Prepared by Immigration Commission. Price, 70 cents.

Immigrants in Industries, Part 14—Cigar and Tobacco Manufacturing; Part 15—Furniture Manufacturing; Part 16—Sugar Refining. Prepared by Immigration Commission. Price, 55 cents.

ENGLISH POULTRY SHIPPED TO UNITED STATES.

[From Consul Homer M. Byington, Bristol.]

During 1911, a poultry raiser in this district exported to the United States \$13,436 worth of White Orpington poultry for breeding purposes. Believing that American poultry raisers would be interested in the methods adopted by this poultry man, I visited his farm. The stock generally consists of 2,000 birds, although others are sent to neighboring farms, which return any desirable ones wanted.

The egg business is not considered, the concentration being upon breeding. The poultry ground is arranged in the form of a hollow square with the houses and runs extending outward. About 15 fowls are kept in each house with a rectangular run of 15 by 30 feet. The birds for these pens are classified when about 3 months old in groups of 15, the pullets and cockerels being kept separate, which results in their better development. Once the pens are established, if a cockerel is taken out for more than a day the others will not let him return and he must thereafter be kept separate.

When the birds have attained their growth, the best ones are selected and kept in smaller pens in groups of 3 and 4. For the ordinary pullets exported to the United States the poultryman receives \$5 to \$10 and for the ordinary cockerels \$10 to \$15, while the specially selected pullets bring \$25 and upward and the specially selected cockerels, \$50, \$100, and upward. He states that the English climate gives him an advantage over American breeders, in that the January, February, and March hatched birds compare favorably with the American April, May, and June hatched birds. The breeder has tried American hot-air incubators, but with poor success, which he attributes partly to the climate here. He has had better luck with water-heated English incubators. However, with so large an establishment the proprietor has not time to attend personally to the incubators constantly, but must depend upon the foreman for results. The latter is an old gamekeeper and prejudiced in favor of the natural process of hatching by hens, from which the results are most satisfactory.

CHANGES IN BRITISH FOREIGN TRADE.

[From Consul General John L. Griffiths, London.]

For the first three months of 1912 British imports aggregated \$914,356,699, exports \$577,269,642, and reexports \$151,766,431.

Taking into consideration the diminished exports for March, 1912, in consequence of the coal strike, the returns for the three months must be regarded as fairly satisfactory, showing as they do in comparison with 1911, which was a year of great trade prosperity in the United Kingdom, a gain in imports of about 6 per cent, and in exports of 3.82 per cent. A proportion of the increases must be attributed to the higher prices commanded by foodstuffs which, of course, as a London financial paper claims—

Represent a direct loss to the nation, but there has been, on the other hand, a considerable saving in the cost of some raw materials, notably cotton, which partially balances the accounts. Perhaps the most noticeable feature, however, is the way the balance of trade has moved against this country, the increase in exports being much less than that in imports, and this can hardly be regarded as a satisfactory sign.

AMERICAN TRADE LOSSES IN AZORES.

[From Consul E. A. Creevey, St. Michael's.]

There is a growing disposition among the importing firms of the Azores, most of which are located here, to make their purchases in either Germany or England, and they are doing so because there are, practically speaking, no facilities for getting American goods direct from the United States. Transshipment via Europe means loss of time, more or less damage because of too much handling, and increased costs. In fact, one of the most important importing firms of this city, which is the distributing port for these islands, canceled orders amounting to more than \$10,000 during 1911 because there was no certainty of the goods arriving in time for the fall trade.

England and Germany have an advantage over the United States, inasmuch as they enjoy fortnightly facilities for delivering their wares direct to this island by two small steamers that bring out miscellaneous cargoes and return with pineapples for the London and Hamburg markets. The Germans, however, are at present getting the better part of all foreign trade and their goods are fast replacing goods formerly supplied by the United States, and their success is due to the fact that they systematically cover this field by salesmen and can guarantee prompt deliveries.

In the matter of charges, terms, etc., the principal importers of the Azores do not ask or expect extended credit and are in position to make satisfactory financial arrangements. What they need most is a service by which they may obtain their American goods when they want them.

For the reason that so many of the inhabitants of the Azores have been in the United States, and naturally are more familiar with American goods than with the goods of other foreign countries, it remains for the United States to provide the means of supplying their goods to them. With a regular service monthly, or even a steamer every two or three months, with positive sailing dates, the United States can have the bulk of the foreign trade.

A NEW PROCESS FOR DEFROSTING MEAT.

[From Dalgely's Review, Sydney, Australia.]

A demonstration, held at Plymouth, of a new method of defrosting meat is described in a report from the New South Wales Agent General in London. By this process frozen meat is thawed in a chamber so constructed that the atmospheric pressure can be regulated and excess moisture extracted without bursting the tissues of the meat. It is claimed that frozen beef and mutton can then be placed on the market in such a condition as to compare favorably in appearance with prime English meat. This demonstration was attended by representatives of the meat trade of Australia, Great Britain, the United States, and South America.

The beef and mutton had been held in a temperature of about 18° for about three weeks after removal from the ship. It was then placed in the patent chambers (beef for 48 hours and mutton for 24 hours), in a temperature of 62°. Upon removal from the chambers the beef was compared with prime English beef and with a frozen quarter from Queensland treated under the old system. It compared favorably with the English meat and was far superior to the Queensland. It had a fine bloom, was free from mold, and there was an entire absence of "leakage." The kidneys and suet fat remained in the treated quarters and when cut were free from bone taint or bone odor. Quarters of treated beef and carcasses of mutton were cut up in the presence of the visitors with satisfactory results, defrosting having been thoroughly carried out. On the following morning the treated meat, cut and uncut, was inspected at the Smithfield Market and found to be still satisfactory and free from the drawbacks of frozen meat marketed in the usual way.

COMMERCE DISSEMINATES NOXIOUS PLANTS.

[From Consul Augustus E. Ingram, Bradford, England.]

Burrs similar to those found in Australian wool were recently discovered in some scoured Kent wools purchased from a Bradford wool merchant. Hitherto English wool has been considered entirely free from objectionable vegetable matter such as burrs, the presence of which so depreciates the value of wool. The explanation is believed to be that the dust from some Yorkshire combing establishment has been sold for fertilizing purposes to farmers, and having been spread upon the land the seed has germinated. A local trade journal commenting on this incident states that no greater calamity could befall the English wool trade than for English wool to become infested with burrs; rather than run such a risk by using the refuse of a wool-combing establishment it would be better to burn this fertilizing material. It might be well for American farmers to take timely warning, as in our more kindly climate the risk of introduction and multiplication might prove even greater.

A botanical observer reported a year or two ago that on the Bradford sewage works at Frizinghall he had picked no fewer than 160 species of plants either foreign to the country altogether, or plants which, although British, do not occur naturally in the Bradford district. Many of the plants undoubtedly owed their presence to their introduction in wool from which the seeds had been washed at the wool combers and then carried through the sewers. Among them were several species of medick or burr of Australian origin, which flowered and seeded abundantly; the thorn apple (*Datura stramonium*) also flowered and seeded; several species of *Amaranthus* were found, as also the "prickly poppy" of Mexico; and one composite, suspected of oriental origin, proved a puzzle to local botanists and experts; but as wool is brought to Bradford from spots where botanists rarely penetrate, a plant new to science is not inconceivable even in the midst of a busy industrial town.

Yorkshire botanists only last year discussed the origin of the large number of exotic plants that have recently sprung up in the heavy woolen district of the West Riding. A Leeds botanist reported that he had discovered plants—some luxuriant in character and others featureless—which are found respectively in Peru and Siberia. The explanation arrived at was that these exotic growths had their origin in seeds carried in the dirt which invariably accompanies the large quantities of rags that arrive in Batley and Dewsbury from all parts of the world.

Another explanation was found in the timber yards. A piece of waste land adjoining a local timber yard became covered with a mysterious plant, which proved to be of a genus found only in the Azores. Upon inquiry it was found that a large quantity of rough wood had been received at the timber yard from the Azores, and that the dirt and adhesive matter had been thrown onto the waste land.

Consul General William H. Michael, of Calcutta, India, forwards a price list of a Glasgow firm manufacturing carriage bolts and nuts and iron wood screws, which may be obtained by application to the Bureau of Manufactures.

CUBAN BUSINESS NOTES.

[From the Cuba Magazine.]

Tobacco Crop Good.

Weather in Cuba this past winter has been most propitious for tobacco growers and from Vuelta Abajo to Mayari reports agree that the quality of that crop this year will be excellent.

New Sugar Mills Projected.

High prices of sugar this season have encouraged capital to invest in plantations and factories in Cuba. It is rumored centrals are to be built at Bayate in Oriente, on Manati Bay on the north coast of the same Province, and at Palacios in Pinar del Rio. Meanwhile actual work is progressing on a new factory at Moron in the center of the island, and McLaughlin Bros., of New York, are erecting a mill at no great distance from Bayamo in the east.

Desiccated Cane Shipments.

The Simons plant for desiccating sugar cane has made its first shipment. The plant is situated at Central Preston on Nipe Bay in Oriente. The process is new and not generally understood; the cane is shredded, dried, and shaped into blocks, in which condition it is shipped north and there treated by diffusion in the beet-sugar factories of Wisconsin. The inventors claim that they obtain all the sugar in the cane, avoid duties, and get a bagasse from which white paper can be made.

Pineapple Shipments to Spain—Glass Jars Wanted.

The Cuban consul at Cadiz, Spain, says:

"For more than 20 years there has existed in Spain a provision firm of great importance, Trevijano Hijos, of Logrono, whose products have made it extremely well known in Latin America. About a year ago, while consul in Madrid, I succeeded in inducing this house to prepare a pineapple preserve. The result has been so favorable that at the present time Milian & Co., exporters of fruits, of Habana, ship monthly to the above firm 400 crates of pineapples.

"There is no doubt that the presentation of its products contributes notably to the success of every industry and, this idea in mind, I proposed to secure a vessel suitable for preserves, which would at the same time look well and be economical. I wrote to numerous glass manufacturers of various European countries and in this way was able to secure the models which, thanks to the kindness of Dr. Emilio del Junco, our present Secretary of Agriculture, were shown in the National Exposition. It would be difficult to find anything better. This sample I chose from among more than 50 which were sent to me by various manufacturers. It comes from Germany, and its cost is 10½ cents f. o. b. Hamburg.

"In case that in Cuba we could not manufacture the same class of package there is no doubt that it could be duplicated in the United States. The customs duties to be paid on manufactured glass on its entry into Cuba would not prove an obstacle, for they are very low—97.5 cents per 100 kilos, or, if marked with the name of the Cuban establishment for which it is intended, 75 cents per 100 kilos. It is the custom to export preserved pineapples either whole, cut into slices, in rectangles or cubes, or grated, and in the form of marmalade or sirup."

SHIPBUILDING IN THE UNITED KINGDOM.

[From Consul General John L. Griffiths, London.]

At the close of March the amount of tonnage under construction in the shipyards of the United Kingdom aggregated 1,686,000 tons. At the close of 1911 the aggregate was 1,519,000 tons, which was without precedent up to that time, but the addition to that total of 167,000 tons indicates extraordinary activity in the shipbuilding industry. The building of large ships still continues, since at Belfast the total of 328,600 tons under construction represents only 26 vessels. Three vessels of 40,000 tons and over are now being built. Of the total tonnage under construction, 75,600 tons are destined for the British colonies, 48,600 tons for Germany, and 44,000 tons for Norway.

FRENCH EXPERIMENTS WITH TARRED ROADS.

[From Consul William H. Hunt, St. Etienne.]

In a report made to the French Academy of Science particular attention is drawn to the danger to the eyes from dust arising from tarred roads. To determine the effect, mixtures of fine road dust to which tar in varying proportions was added were made up, and the eyes of rabbits dusted with the mixtures. The results were conclusive. While the pure road dust had little or no effect on the rabbits, their eyes were greatly affected by the presence of tar and serious diseases broke out after these applications, showing the noxious effect of the tar.

Tarring produces good results only if the roads are well built and in repair, and composed of sufficiently hard materials; if the tar fully penetrates the crevices and does not form an external crust which the first winter rains would raise up and transform into mud; and, finally, if the drying conditions during the bad season are satisfactory. With these few restrictions, it may be said that tarring effectively protects the surface of highways against motor-car traffic, and even against ordinary traffic if the latter be not extraordinarily heavy.

The use of superficial tarring is becoming more and more extended, principally in the neighborhood of Paris. In the St. Etienne district and other parts of provincial France, progress has been slower except near a few large industrial centers. However, a certain increase in the mileage of tarred roads was reported from 1908 to 1909. The appropriation allowed for these experiments in 1909 in 24 Departments amounted to \$19,077, covering 126 kilometers of tarred roads, compared with 75 kilometers in 1908. (One kilometer equals 0.62137 mile.)

Other Substances Employed.

In the Department of Loire the tar is spread hot by hand or by a spray. Another method consists in rendering cold tar fluid by the addition of 10 per cent of crude oil and spreading it by the same means as the hot tar.

In the Department of Seine et Oise recent experiments have been made with divers tar and oil emulsions; deliquescent salts also have a real effect, but unfortunately of short duration, so that they can be employed only for special occasions, such as fêtes, races, etc. This department employs every year solutions of calcium chloride for watering certain sections of the roads which are not in a sufficiently good condition to receive a coat of tar, at the cost of 2 cents per square meter (1.196 square yards). If the weather is too dry the road is sprinkled with ordinary water.

Chloride of magnesium produces the same results, but the price is higher. It is used in Germany, where 3 per cent solutions (because of their low congealing point) lay the dust in the streets during winter. Emulsions such as westrumite and similar products appear to be abandoned of late because of their high price and short duration.

In France a few experiments have been made with crude petroleum, so much employed in America, but they were not continued on account of the high cost and the inconvenience of the mud which appears with the autumn rains. Besides the superficial coatings mentioned, certain binding materials are employed as a substratum to the macadam. Tar macadam is extensively employed in England, and has recently been tried in France.

AUTOGENOUS WELDING IN GERMANY.

[From Consul General A. M. Thackara, Berlin.]

Autogenous methods of welding metals are used extensively in Germany, practically all of the larger manufacturers of metal wares, tubes, automobiles, bicycles, steam boilers, etc., having their own welding plants.

Recently there has been a notable increase in the number of small welding apparatus, that is, those having a carbide capacity of 2 kilos (4.4 pounds) or less. These can be used without having the special license from the police authorities required for apparatus having a capacity of over the above amount. There are comparatively few independent welding plants. In by far the greater number of factories acetylene is used for welding instead of hydrogen gas, those plants using acetylene having their own generating apparatus. German engineers claim that although the prices of acetylene and hydrogen are practically the same, it requires from three to five times as much hydrogen to do a given piece of work, and, furthermore, hydrogen is not suitable for welding pieces of more than 8 millimeters (0.315 inch) in thickness.

The price of hydrogen is about 1 mark (23.8 cents) per cubic meter (1.3 cubic yards), which is approximately what acetylene costs the producer having his own generating plant. The price of oxygen is about 2 marks (47.6 cents) per cubic meter. The temperature limit for hydrogen is 1,900° C. (3,452° F.) and of acetylene it is 3,500° C. (6,332° F.). The metal thicknesses that may be welded by the two systems are one-third inch and 1½ inches, respectively.

One authority estimates that autogenous-welding apparatus is used in upward of 12,000 plants in Germany. The industry has become of such importance that an association called the Verband für Autogene Metallbearbeitung, at Stuttgart, has been formed to protect its interests.

Courses in the manipulation of welding apparatus have been given by Theo. Kautry, Teutobergerstr. 40, Cologne am Rhein, and by Hugo Baendel, Koloniestr. 6, Berlin. The Handbuch für Carbid und Acetylene, by Prof. Vogel, published by Friedr. Vieweg & Sohn, Braunschweig, has been recommended to this consulate general as the best work describing the different German welding apparatus. This book costs about 15 marks (\$3.57) and may be purchased from the publishers direct or through any local book dealer.

[The names of manufacturers of autogenous-welding machinery in both the United States and Germany may be obtained from the Bureau of Manufactures.]

IRON-TUBING IMPORTS OF JAPAN.

[From Consul General Thomas Sammons, Yokohama.]

Iron tubing valued at \$2,125,000 was imported into Japan in 1911, of which the United States contributed \$778,000 worth. The valuation placed on iron tubing imported into Japan in 1910 was \$1,613,000, and during the year 1911 Germany nearly doubled its importations, while Great Britain's increased approximately 25 per cent. The importations of American iron tubing during 1911 remained stationary as compared with 1910, the importations for the latter year being valued at \$775,000.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

No. 616. Navy Department supplies.—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until May 21, 1912, for the following supplies. Firms interested therein should make application to the Bureau of Supplies and Accounts, giving the schedules desired by number: Schedule 4519, black metal buckles, stay binding, checks, silk laces, Dowlas linen, silesia, silk, terne-plate roofing tin; schedule 4513, iron chain cables, lavatories, square long sail needles, porcelain urinals, steel bolts and nuts, blacksmith's forges, combination locks and latch, wire steel nails, portable scales with wheels, steel wheelbarrows, cast-steel crucible wire; schedule 4522, chairs; schedule 4525, officers' messes chinaware, crews' messes chinaware, laundry fresh-water soap, crews' messes tableware; schedule 4518, foundry coke, gauge glasses, Klinger gauge glasses and frames, rubber hose; schedule 4512, hose expanders, window glass, air hose, rubber fire hose, wire-wound rubber hose, ball spun lamp wick, rubber mats, machine-spun oakum, cotton white tape, burlap, white table felt; schedule 4508, strip and sheet gum gaskets, hose washers; schedule 4520, tandem steam road roller; schedule 4521, sand; schedule 4514, brass voice seamless tubing, copper sheathing, Muntz metal sheathing, half-and-half solder, spelter solder, soft wiping solder; schedule 4517, copper tubing, brass nuts, rod brass, rolled sheet brass; schedule 4509, lead covered lighting and power (rubber insulated) wire; schedule 4515, white ash, white pine, yellow pine; schedule 4510, white pine; schedule 4516, lump borax, mineral kerosene oil, dry Venetian red, spar varnish, American process white zinc in oil; schedule 4523, distillate, mineral kerosene oil; schedule 4524, gasoline.

No. 617. Olive-drab cotton webbing.—Sealed proposals, in duplicate, will be received at the Rock Island Arsenal, Rock Island, Ill., until May 6, 1912, for furnishing and delivering at the arsenal olive-drab cotton webbing, in accordance with specifications, copy of which will be furnished upon request to the Commanding Officer, Rock Island Arsenal.

No. 618. Buildings and water and sewer systems.—Proposals will be received at the Indian Office, Washington, D. C., until May 24, 1912, for furnishing materials and labor for the erection of a frame office building and frame quarters and installation of water and sewer extensions at the Colorado River Indian School, Arizona, in strict accordance with the plans, specifications, and instructions to bidders, which may be examined at the Indian Office, the offices of the Supervisor of Construction, Denver, Colo., the Builder and Contractor, Los Angeles, Cal., the Arizona Republican, Phoenix, Ariz., the Post, Denver, Colo., the United States Indian warehouses at Chicago, Ill., St. Louis, Mo., Omaha, Nebr., and San Francisco, Cal., the Builders and Traders' Exchange, Minneapolis, Minn., and at the school. For further information apply to the Superintendent of the Colorado River Indian School, Parker, Ariz.

No. 619. Switchboard and frame for Signal Corps.—Sealed proposals, in duplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until May 6, 1912, for furnishing the Signal Corps with the following: (1) One switchboard, common battery, 2-position, in accordance with specifications Nos. 567 and 321d, and drawings Nos. 688d-3, 688g-1, 688-L, 688m, and 688o, serial number 459; (2) one frame, distributing and protecting, sectional angle irons, with 240 pairs capacity, and equipped with 140 pairs central energy heat coil and lightning arresters, and with 400 pair line terminals capacity, equipped with 240 pair line terminals. Protectors to be W. E. Co. type 84-B, in groups of 20, detachable from frame, line terminals in blocks of 20-pairs detachable from frame on horizontal side. (3) Extra parts for item 2: 100 heat coils, 50 pairs carbons, and 200 mica dielectrics. (Proposal No. 581.)

No. 620. Olive-drab cotton duck.—Sealed proposals, in duplicate, will be received at the Rock Island Arsenal, Rock Island, Ill., until May 6, 1912, for furnishing and delivering at the arsenal various quantities and qualities of olive-drab cotton duck, in accordance with specifications, etc., which can be obtained by interested persons or firms by addressing the Commanding Officer, Rock Island Arsenal.

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CORK INDUSTRY OF SPAIN.

[From Consul Charles S. Winans, Seville.]

Barcelona and Seville are the chief Spanish ports from which cork is shipped to the United States. The extent to which each shares in this trade is shown by the following summary of the invoices declared for export to American purchasers during the calendar years 1910 and 1911 [the figures for Barcelona being added by the Bureau of Manufactures]:

Corkwood and manufactures.	Barcelona.		Seville.	
	1910	1911	1910	1911
Corkwood.....	\$152,744	\$403,300	\$1,024,773	\$719,674
Shavings and waste.....	529,906	454,217	69,802	82,573
Corks.....	1,229,774	1,808,521	23,586	18,792
Disks.....	259	84,317	1,891	12,941
Soles.....	1,107	4,467	12,016	9,666
Paper.....	502	14,662		
Life preservers.....			9,040	13,627
Other.....	2,059	144		1,239
Total.....	1,916,353	2,766,608	1,141,108	838,512

From the Huelva agency, in the Seville consular district, \$5,950 worth of cork shavings was shipped to the United States in 1910 and \$15,015 worth in 1911; from the Cadiz agency \$18,539 worth of corkwood and waste was declared in 1910 and \$10,450 worth in 1911. The total declared exports from the Seville district were therefore valued at \$1,165,597 and \$883,977 for these respective years, the decrease in 1911 being due in large measure to a lack of shipping facilities. The total exportation of cork bark and shavings and corks from the port of Seville to all countries amounted in 1911 to 12,979 metric tons, 7,592 tons of which went to the United States.

Stripping Methods.

The cork tree is a species of oak (*Quercus Ilex*, better known as *Q. Suber*) whose outer bark, which is the commercial cork or "cork-

wood," is first harvested when the tree has a circumference of about 16 inches, and thereafter regularly every 9 or 10 years throughout the life of the tree. The best bark, commercially speaking, is produced when the cork tree is 50 to 100 years old. Instead of injuring the tree, stripping the bark seems to add impetus to the growth of a new coat.

Stripping the bark, which is usually done during the summer months, is necessarily a rather delicate operation, as great care must be taken not to wound the tree. The local method of cutting is by a hatchet, which perforates the bark in complete circles at the base of the tree and at the lowest fork of the branches; this cylinder-like coat by a downward slash is then generally loosened from the inner bark of the tree and is removed by prying with a wooden wedge. The same treatment is accorded such larger branches as will yield bark at least one-half inch in thickness. The bark taken from the tree trunk sometimes measures more than 2 inches in thickness, and the total yield of the tree occasionally reaches 500 pounds, though this yield varies enormously, from 50 pounds upward, in accordance with the age and size of the tree.

After having been stripped the bark is generally left for a few days to dry. It is next weighed and then taken to the boiling station. The simple boiling process makes the bark soft and flexible, and, quite as important, renders easy the scraping off of the woody, weather-hardened outer coating, which is commercially useless.

Foreign Markets—Local Manufactures.

Occasionally the boiling station is located near the cork forest; in other instances, at the shipping point, where the cork factories are situated. At these factories the bark is sorted very carefully, according to quality and thickness, and is then (if for sale as raw corkwood) baled for shipment. It may be said that by far the greater quantity of the cork yield of Andalusia is exported in this unworked state to England, Germany, Austria, and Belgium, as well as to the United States. An important American firm has a branch house in Seville from which it ships to its home factory a very large quantity of the "corkwood" to be manufactured into articles of commerce.

Other local factories produce for domestic and export purposes a relatively small number of manufactured articles, although with the installation of machinery the output is gradually widening in scope and increasing in quantity. In the manufacture of these articles there is a very great amount of unavoidable waste, which is largely exported in the form of cork shavings, for use in making linoleum and other by-products of cork.

Of all the uses to which corkwood is now put, the manufacture of corks themselves still remains preeminent. Formerly in this consular district corks were made almost entirely by manual labor; the workers cut the bark into small squares, from which they whittled out each cork by hand. At the present time this method is still employed in the very small and unimportant "home" factories, where the family constitutes the working force, but the larger local establishments use very satisfactory machinery for the production of corks and disks. One local factory, to supply the export demand for the typical "handmade cork" (an almost square cork with rounded corners), has invented and installed a simple moving blade

machine, operated by hand; this combines speed and accuracy, and turns out the desired "handmade" type of cork.

Cork-Making an Interesting Process.

The manufacture of a cork is a rather interesting process, when watched from the beginning. Before use at the factory the cork bark in loose bales, is boiled for about half an hour to render it pliant; upon drying, it is sorted into at least ten grades of differing quality and thickness. This sorting is most important, if waste is to be reduced to a minimum, for corks are cut from the bark transversely, and are hence limited in their diameter (rather than in their length, as might at first be supposed) by the thickness of the bark. After sorting, the sheets of bark are cut into strips and squares, according to the length of the cork desired. Next the cork itself is carved out of the small square block, polished by a sand-papering machine, washed, sorted, and disinfected. The corks are counted by an ingenious French machine, and shipped in sacks of strong burlap containing generally 100 to 150 pounds.

Cork disks, for use in lining metal stoppers, are fast becoming an important article of trade in the cork industry. In their manufacture simple machinery is employed, operated, in some factories, by an electric motor. Among the other articles in the manufacture of which cork is increasingly used are insoles, life-preservers, cigarette tips, instrument handles, polishing wheels, carburetor floats for automobiles, and insulating for pipes. These articles, however, are not much made here. For the manufacture of such few cork articles as are here produced, the local factories are, as a rule, fairly well equipped with machinery, when the very low cost of manual labor is considered. Many of the employees, especially for the machine processes, are women who attain a degree of dexterity. Electric power from the city supply has been installed in several plants.

The enormous waste of cork which is inevitable in the manufacture of cork articles—approximately from one-half to two-thirds of the total material—is not in reality a loss. Naturally the best of the cork bark is utilized in cork products, and the refuse and shavings are exported to England, Germany, and the United States to be used in such valuable by-products as linoleums, cork tiling, and other composition articles.

Possible Opening for American Machinery.

At present there is no export duty on cork shavings; on corkwood the export duty amounts to 97 cents per 220.4 pounds. There has been and is much agitation of the question of raising this export duty tenfold to encourage the home industry, and the same question is being seriously considered by Portugal. The Spanish owners of domestic factories are heartily in favor of this "protective" law, as are also the various labor organizations, and it is believed by those who are best informed that it is but a matter of time when the exportation of unworked cork will be practically prohibited by the increase in export duty.

In effect, this prohibition will doubtless mean the establishment in the Seville consular district of cork factories under foreign management and the expansion of the present local plants into manufactories of all the more important cork articles. For this purpose

much supplementary machinery will be needed; and there will be an opportunity to introduce American machines, which are not well known at present. Machines of Spanish, French, German, and one Canadian make are mostly used.

[Other recent articles on the Spanish cork industry appeared in Daily Consular and Trade Reports on July 5 and Oct. 18, 1911, and a review of the French cork trade was published Feb. 24, 1912.]

PREVENTION OF SHORT-PAID POSTAGE.

Consul Alfred Winslow, of Valparaiso, in a recent report again calls attention to the subject of short postage on letters from the United States to Chile, stating that the consulate receives by each mail from the United States from 6 to 15 letters bearing only 2-cent stamps. The consul quotes from a letter received from one of the leading import houses in Chile, as follows:

The frequency with which we receive letters from the United States insufficiently stamped makes it desirous that attention be officially called to the fact. In the case of correspondence of value this would be a small matter, but as we are constantly flooded with all kinds, a large proportion of which is of no use to us and is unsolicited, the almost daily payment of 12 cents and more on each of a large number of letters becomes tiresome.

Foreign postage is one of the subjects treated in a bulletin just issued by the Bureau of Manufactures, entitled "Factors in foreign trade," in which it is stated for each country whether Postal Union or other rates are applicable and whether there is a parcel post with the United States. In a summary of postal regulations there are given in detail the Postal Union rates, parcel-post regulations, and a list of countries for which international reply coupons are available. Copies of this bulletin, if placed in the hands of those in charge of mailing letters to foreign countries, would do much toward preventing short-paid postage, of which consuls and others have repeatedly made complaint. Copies of the bulletin may be obtained by application to the Bureau of Manufactures.

INTERNATIONAL COTTON STATISTICS.

[Report of Arno Schmidt, secretary International Federation of Master Cotton Spinners and Manufacturers' Associations, forwarded by Consul Church Howe, Manchester.]

Stocks of cotton held by spinners throughout the world on March 1 amounted to 4,200,413 bales, as compared with 4,060,740 bales in 1911. The stocks of American cotton amounted to 2,815,942 bales, against 2,565,500 bales 12 months previously. The spindles of the world are 139,312,870 and returns by the international federation have been received from the owners of 123,564,126 spindles. In Great Britain there are 55,164,794 spindles, and firms representing 48,220,302 spindles have made returns. There are 39,776,223 mule spindles, and 8,444,079 ring spindles. Spindles in course of construction at present are 710,332.

[From the Lancashire Cotton Spinners and Manufacturers' Directory for 1912.]

The Lancashire Cotton Industry.

The net increase in the number of spindles in Lancashire during 1911 was the lowest since 1902. During the year 137,785 spindles were added to those in operation in the county. There was, however, a substantial addition of 17,452 looms, the largest increase since the year 1906. The chief increases in spindles are: Oldham, 95,147; Blackburn, 52,156; Bolton, 32,500; Accrington, 23,204; and Wigan, 10,440. The chief extensions in looms are: Burnley, 4,564; Nelson, 2,010; Clitheroe, 1,506; Hyde, 1,333; Bolton, 2,222; and Ashton-under-Lyne, 1,026. Throughout Lancashire there are now 758,712 looms.

CONSTRUCTION WORK ABROAD.**CANADA.**

[From Consul General John G. Foster, Ottawa.]

Construction of Dry Dock at Quebec.

The Canadian Department of Public Works has advertised for tenders for constructing the Quebec Dry Dock under the dry docks subsidies act (announcement of which was made in Daily Consular and Trade Reports for Apr. 20 and 27, 1912). Tenders will be received up to July 2. It is intended that the dry dock shall be at Lauzon, or in the estuary of the River St. Charles, or on the Beauport Flats, in the Port of Quebec. Applicants will be required to submit with their proposal a report signed by their engineer setting forth in detail (1) the respective advantages from the viewpoint of the shipping interests of each of the above-mentioned sites; (2) plans and specifications with full and detailed estimates of cost.

The dry dock is to be not less than 1,150 feet usable length, 110 feet clear width at entrance, and at least 37 feet in depth over sill and keel blocks. The dry dock is to be completed within four years from the date of the execution of the subsidy agreement. No proposal will be considered unless accompanied by an accepted check for \$50,000.

Widening of Soo Canal.

The Department of Railways and Canals at Ottawa has advertised for tenders for widening the lower entrance channel way, Sault Ste. Marie Canal. Tenders will be received until May 10, 1912, by the Secretary of the Department of Railways and Canals at Ottawa.

[From Consul Abraham E. Smith, Victoria, British Columbia.]

Buildings and Enterprises on Vancouver Island.

Construction work in Victoria continues active, some of the enterprises being summarized as follows:

The Westholme Lumber Co. is constructing a 7-story \$100,000 block for Hibben-Bone Co., the new St. James Hotel structure, the Bell apartment, all in Victoria, and a big warehouse for Brackman & Ker (Ltd.), at Nanaimo. The company also has contracts for a large salmon cannery at Aliford Bay, near Skidegate, Queen Charlotte Islands, for the British Columbia Fisheries (Ltd.), a \$15,000 bungalow at Somenos, and a tramway for carrying lime and rock for the Vancouver Island Cement Co.

A 3-story apartment and business block is being built for H. Harkness, by Scott Bros.

The Canadian Pacific Railway is calling for tenders for constructing machine shops, roundhouses, turntable, and repair tracks in Victoria West, expenditure \$100,000. Such works are now all at Wellington, but hereafter the car shops will all be at Victoria.

The Victoria and Vancouver transfer companies are to be consolidated (capital \$500,000) and worked by motor traction. A full equipment of motor vehicles for all kinds of delivery and private accommodation is to be imported.

The railway subsidies granted by the Dominion Government of \$12,000 per mile include the following extensions on Vancouver Island: Esquimalt & Nanaimo Railway, Wellington to Alberni, 60 miles; McBride Junction to Sandwich, 45 miles; Sandwich to Camp-

bell River, 38 miles; and near Campbell River toward Fort George on the G. T. P., 100 miles.

Three American air compressors, made by Chicago Pneumatic Tool Co., have arrived to assist the city engineers in rock excavation for sewers. The compressors drill and remove 300 feet of rock per day, justifying the expense of \$2,200 each.

The new \$80,000 Odd Fellows Building in Victoria will include a ballroom 70 by 90 feet, with galleries, etc., the largest in the city; a large banquet hall, kitchens, dressing rooms, lodge rooms, social hall, and balcony.

The new Provincial gaol, to be built on a 25-acre suburban site, will cost \$100,000.

The British Columbia Permanent Loan Co. has decided to erect a 10-story \$200,000 office building of steel and reenforced concrete, with 125 rooms and offices.

The new municipal hall for Oak Bay, suburb of Victoria, will be built at once by A. H. Mitchell, whose tender was \$10,500. Building permits issued in Oak Bay in April involve \$27,000 expenditure.

Contract has been awarded for a 7-story office and mercantile building of reenforced concrete for Duncan Campbell.

[From Consul Frank C. Denison, Fernie, British Columbia.]

New School Building.

Notwithstanding that about \$75,000 was expended for new school buildings during 1910 and 1911 and that they would accommodate about 750 pupils, it has been decided that another large brick building is necessary that will furnish room for 500 to 600 more scholars. It is expected that Fernie voters will indorse the appropriation of \$50,000 for its erection. It is intended to have work started upon the new building by the middle of May.

UNITED KINGDOM.

[From Consul General John L. Griffiths, London.]

Proposed British Railway Improvements.

The following facts are condensed from the London Times of April 10:

The program of new works proposed by existing railway companies in the United Kingdom in bills and provisional orders in the present session of Parliament contemplates a total expenditure of \$20,011,242, exclusive of \$867,502, for Edgware & Hampstead Railway works authorized by previous acts and intended to be replaced by deviations and alterations at an extra cost of \$642,052.

Existing companies propose to construct a new railway 45 miles single and 20½ miles double tracks. Double-line widenings aggregate 29½ miles, most important being the Great Central outside Sheffield and at various points between Mexboro and Barnethy, total 22½ miles, estimated cost \$2,400,381. Of 28½ miles of single-line widenings, 26½ miles will be constructed at different points on the Great Eastern, estimated cost \$661,557; and double-line deviations, alterations of levels, etc., 4½ miles.

By individual companies the largest expenditures will be made on electric railways in London district. The London Electric Railway Co. contemplates spending \$3,664,474 and the London & North Western \$2,877,425. A new line to Watford and widenings between Finchley Road and Wembley Park will cost the Metropolitan \$1,825,638. The Metropolitan District Co. contemplates \$1,190,175 expenditure on widenings between East Putney and Wimbledon, and the Great Western and Midland companies propose outlays of \$1,942,488 and \$1,697,941, respectively, in South Wales and other parts of their system.

Existing companies propose to spend the following amounts: On 113 bridges over public roads, railways, rivers, or canals, \$826,878; on accommodation works, \$1,281,524

on viaducts, \$664,934; on tunnels, \$3,771,381; on retaining walls, \$582,929; on covered way, \$162,478; on electrical equipment, \$42,275; and on stations, \$1,109,635. On widening, lengthening, or reconstruction of bridges, \$326,639 is proposed to be spent by the Great Western Co., \$53,531 by the Great Eastern Co., \$4,818 by the Great Central Co., and \$3,163 by the Caledonian Co. The Great Eastern Co. proposed also to spend \$73,172 on river walls and \$13,845 on pier works; and new subways will cost the London Electric Co. \$205,366.

Two railway proposals by new companies seeking incorporation are the Canvey Island Deepwater Wharf and Railway, with a proposed expenditure of \$2,458,653, and the Lothian Railways with \$1,456,855. The Canvey Island expenditure includes \$1,672,713 on the construction of a new wharf, and the remainder on constructing 4½ miles of single line, involving \$136,262 for a public road and railway bridge, \$10,920 for culverts and drains, and \$14,137 for stations. The 14½ miles of single line and three-eighths mile double line of the Lothian Railways are estimated to involve expenditures of \$239,870 for 33 public road and railway bridges, \$58,130 for accommodation works, \$194,660 for viaducts, and \$37,082 for culverts and drains.

INDIA.

[From Consul Edwin S. Cunningham, Bombay.]

Supplies for Waterworks.

This is a particularly opportune moment to bring to the attention of the municipal authorities of Bombay supplies which are required in the construction of waterworks or for the increase of an existing water supply. The necessity for the increase of the water supply in Bombay has long been recognized, but nothing has been done since the completion of the Tansa Reservoir in 1892.

Recently the water engineer was requested to submit a report concerning certain proposals which had been made for the increase of the city's water supply. This report is now before the Bombay Corporation and will be considered very shortly. One of the plans advanced, to develop the supply from Tansa Lake, which is 55 miles from Bombay, proposes the duplication of the syphon by 48-inch conduits, which will bring into the city another 18,000,000 gallons per day, increasing the total supply to 49,500,000 gallons. This will necessitate considerable expense and the raising of the height of the dam. It is proposed to construct certain storage and terminal reservoirs. To carry out the suggestions of the engineer for the improvements and increase of the water supply would require 9,232,000 rupees (\$2,994,245).

While there is considerable agitation at present and the requirements of the city will soon demand that an increase be made in the water supply, it must be understood that the foregoing statements are but notes taken from a report and such as have been discussed in local newspapers. Nothing definite has been authorized, but it is safe to say that the demands of the city are such that the municipality will soon take definite steps for the increase of the water supply either along the lines of the report or some other directions.

BURMA.

[From Consul M. K. Moorhead, Rangoon.]

Comprehensive Plans for Road Construction.

The intention of the Government is to spend approximately \$1,000,000 per year over a period of 10 years in improvements of roads in the Province. The existing roads will be properly metaled, permanent steel and masonry bridges will be substituted for the

present timber bridges, feeder roads along the railway and river will be constructed, and the present roads will be linked up. In Tenasserim, from Moulmein to Victoria Point, a trunk road will be constructed, supplemented by feeder roads.

With the carrying out of this program Burma would possess, in addition to the 1,673 miles of metaled roads already existing which would be brought up to a first-class standard, about 1,100 miles of main routes extending northward from Rangoon to Shwabo and southward from Moulmein to Victoria Point. There would also be an additional 2,000 miles of feeder roads. When completed the Province would possess a total of 2,800 miles of first-class roads, bridged and metaled and 8,000 miles of cart road and bridle paths. This work will probably be performed by the Public Works Department. The average cost for the construction of a first-class road, bridged and metaled, is estimated at \$6,000 to \$7,000 per mile.

This proposal must first be passed by the Burma Legislative Council and then approved by the Government of India and the Secretary of State.

Stimulation to Machinery Trade.

The construction of these roads will induce a great expansion in the mining industry of Tavoy, Tenasserim division, and there should be increased demands for American mining machinery. The Public Works Department will also need a considerable amount of road-building machinery and supplies, but preference will be given to Indian and British made goods, as this is a Government undertaking. With the linking up of existing roads and construction of new roads there should be an increased demand for automobiles and commercial and large passenger cars.

Present Roads of Burma.

According to the revenue secretary to the Government of Burma there are in Burma 1,527 miles of railway, 1,673 miles of metaled roads and 5,497 miles of unmetaled roads, for the most part mere village cart roads and bridle paths, over an area of 168,573 square miles and for a population of 10,500,000, excluding the Shan States. In the Federated Malay States, with an area of one-sixth that of Burma and a population of less than one-tenth as large, there are more miles of metaled roads than in Burma. In all of Burma there are only a little over 100 miles of roads which are capable of bearing the strain of motor traffic. With a few exceptions the metal of the roads consists mainly of burnt clay, pebbles, laterite, and local stone and deteriorates rapidly under even moderately heavy traffic. None of these metaled roads are over 10 feet wide and 90 per cent of the bridges are constructed of wood.

On account of the lack of funds no new metaled roads have been constructed in the Province during the past two years, and the appropriations available for maintenance have been so small that many roads have fallen into bad repair. The existing roads are mostly scattered all over the country without any connection with each other, each road apparently having been built to meet local demands without consideration of the requirements of the Province as a whole. The utility of the railroad is impaired by the lack of feeder roads connecting the various villages. There are large sections

of the country which have no outlet for their produce either to the railway or rivers on account of lack of roads.

Procuring Funds for Good Roads.

In the Tenasserim division there is said to be good land suitable for rubber cultivation and the existence of rich deposits of tin and wolfram (tungsten) has been confirmed by the geological survey. The development of rubber plantations and of the mining industry is retarded by lack of communications. The Government of Burma has long been considering means of improving the roads, but the lack of provincial funds has made any large expenditure impossible. In 1910 the Government of India was asked to appropriate out of imperial funds 40 lakhs of rupees (\$1,297,320) annually for five years in order to enable the Province to make up these deficiencies in means of communication in Burma. This request having been definitely refused, it is now proposed to raise the necessary funds by a special tax on the exportation of rice for 10 years, the rate proposed being 4 annas (8 cents) per bag of 224 pounds on rice exported to India and 1 anna (2 cents) on rice to foreign countries. This tax would be in addition to the existing export duty of 3 annas (6 cents) per maund (82½ pounds) on rice exported to foreign countries. This tax, it is estimated, would produce annually an average amount of \$1,031,208, of which \$735,887 would be contributed by exports to India and \$295,321 by exports to foreign countries.

PHILIPPINE ISLANDS.

Large Sum for Public Improvements.

The following statement from the Manila Free Press is corroborated by the Bureau of Insular Affairs, War Department, Washington, D. C.:

Various Provinces of the Philippine Islands will be benefited by the determination of the Government to withdraw from deposit in banks of the United States low interest-bearing funds amounting to ₱4,500,000 (\$2,250,200 gold) for the purpose of lending this money to provincial and municipal governments for works of public improvement. The funds now in American banks draw 2½ per cent interest and will be loaned in the islands at 4 per cent.

ASPHALT FOR BRITISH STREETS.

[From Consul General John L. Griffiths, London.]

The United Kingdom imports about 65,000 tons of rock asphalt annually. In 1910 the quantities bought from various countries, with their values per long ton, were as follows: From Germany 24,960 tons (\$11.33), France 11,985 tons (\$10.27), Italy 10,308 tons (\$9), British West Africa 15,421 tons (\$14), United States 3,697 tons (\$20).

In London asphalt paving is practically in the hands of two firms, one French and one Italian, which are constantly employed in relaying and repairing streets and footways. Outside the city area the maintenance of roads and walks is controlled by the various municipal boroughs, and the work is done by contractors who are the successful bidders. Except in the city itself, wood blocks and macadam are more generally used than asphalt, but there is, notwithstanding, a considerable part laid with the latter.

RAILWAY DEVELOPMENT IN MOZAMBIQUE.

[From Consul George A. Chamberlain, Lourenço Marquez, Portuguese East Africa.]

The importance of the two principal railways of the Province of Mozambique, Portuguese East Africa, is out of all proportion to their mileage. The main line from Lourenço Marquez to the Transvaal border is only 55 miles long, but it does an enormous carrying trade in both goods and passengers, for this port is not only the gateway to the Transvaal but is also the source from which the mines draw annually 60,000 "boys." ("Boy" in Africa is used to designate a working native irrespective of his age.) It should be noted that an equal number of "boys" return each year and that they pay a full rate of passage. Branching off from this main road is the Swaziland line, 35 miles in length. It connects Lourenço Marquez with Mailana and is being extended to the Swaziland border. Its completion will effect a saving not only in cartage costs but also in railway mileage.

The Swaziland Railway was started with the idea of opening a shorter route from Lourenço Marquez to Johannesburg, and the Portuguese portion was finished years ago, but a hitch occurred as to the British section. As a result an economic anomaly exists. Johannesburg, with its annual importation of approximately \$30,000,000 worth of goods via Lourenço Marquez, is nine hours farther by rail from that port than it need be. The yearly waste is tremendous, but it is offset in a measure by the advantage that accrues to another section of the South African Union, which sees in the completion of the Swaziland Railway the decline of Durban's career as a port of entry for the Rand. Durban has for years been the rival of the Delagoa Bay (Lourenço Marquez) and has tried, with great effect, to do artificially for its harbor what nature has done for the latter; but eventually the Rand must cease paying this extra freight on its machinery and supplies, and in that day the Swaziland Railway will be an economic factor big enough to change the channel of trade, and Durban will become what it logically is—a splendid port for its own rapidly developing hinterland.

Routes to the Northeast.

Starting 32 miles from Lourenço Marquez on the main line a branch running northeast and paralleling the coast for 50 miles is to be laid to the settlement of Xinavane, and also to Magude on the Incomati River. The Incomati Estates (Ltd.), a sugar concern that is beginning operations on a large scale, has secured the contract for this line. A request has been made for tenders for the extension of this branch 125 miles in the same general northeasterly direction to Manjacase, where it is to connect with the railway at present under construction from the port of Chai-Chai on the Limpopo River, which enters the Indian Ocean about 90 miles up the coast from Lourenço Marquez.

This latter road, starting from Chai-Chai, is known as the Gaza Railway, and 20 of the 33 miles to Manjacase are already completed and in operation. It is a narrow-gauge road intended to open a fertile region hitherto inaccessible to commerce. Its usefulness is seriously handicapped by the dangerous shoal bar in the Limpopo River that makes Chai-Chai a most difficult port to enter. The materials for this railway, as well as the rolling stock, were furnished by a German firm that secured the contract through public tender. [For an article pertinent to public tenders for Portuguese East African

contracts see Daily Consular and Trade Reports dated Jan. 22, 1912.] From it three branches are planned, the most important of which is the line continuing northeast parallel to the coast to Inharrime, shortly to be the terminus of the line now being built south from the port of Inhambane. The Inhambane Railway starts from a point two hours by river above the town of Inhambane, and is under construction to Inharrime, as stated, a distance of 40 miles, 25 miles of which are already completed.

Beira and Quelimane as Railway Centers.

The railways and branches so far mentioned form a distinct part of the system which has Lourenço Marquez, the capital of Mozambique Province, as its center of radiation. Directly north of the district of Inhambane, however, come the territories of the big charter organization known as the Mozambique Co. Beira, the port and capital of the Mozambique Co., bears the same relation to Rhodesia that Lourenço Marquez does to the Transvaal, and it has been connected with Salisbury, Bulawayo, and practically all South Africa, including the newly opened Belgian Kongo hinterland, by the Beira & Mashonaland Railway, which forms the shortest link between the highlands of Rhodesia and the sea. This railway is owned and operated by British capital, but the Mozambique Co. retains an inalienable right to a certain number of votes whether it disposes of its shares or not.

Proceeding northward, the next beginnings of a railway are found at Quelimane, one of the ports for the Zambesi delta, with which river it is connected by a devious inland channel scarcely navigable at present. Quelimane is without question the outlet for the richest and most productive section of Portuguese East Africa. The Zambezia Co., holding a large land grant from the Portuguese Government, owns an 18-mile railway starting from the port of Quelimane. Besides this private enterprise the provincial government has called for tenders for 15 miles of the Nhamacurra Railway, which is to connect Nhamacurra with Villa Durão, the total distance being 50 miles. This railway will tap a most fertile region.

Construction of New Railway.

Authority has been vested in the British Nyasaland Protectorate Government to contract with the British Central Africa Co. for public lands to which the Shire Railway is at present entitled, and to guarantee interest on the capital required to extend the Port Herald Railway to the Zambezi River [mention of which was made in Daily Consular and Trade Reports on Mar. 15]. The Portuguese Government has been asked to consent to the passage of the railway through its African territory, and arrangements have been concluded with the Mozambique Co. to build a section of the line from the Zambezi to the port of Beira. It is announced that the Portuguese Government has given the consent requested and that arrangements for the construction of the whole railway are about concluded.

There is no doubt that Quelimane would be a much nearer exit to the sea for British Nyasaland, but against this factor the Mozambique Co. presents in Beira an established harbor open to vessels of any draft at present plying on the East Coast and whose port works are already in process of construction. There has as yet [Mar. 7] been no call for tenders for construction or material for the projected railway, and it is advisable that American firms wishing to compete

should at once get in touch with the Mozambique Co., either at its home office in Lisbon, Portugal, or at its headquarters at Beira, Portuguese East Africa. [The name of a firm in Beira which might be approached by Americans desiring an agent in that port may be obtained from the Bureau of Manufactures.]

The standard gauge for Portuguese East Africa is the South African gauge of 3 feet 6 inches. This gauge obtains in most of the beginnings of railways undertaken by the Government as it utilizes the material and rolling stock discarded by the main Lourenço Marquez-Johannesburg line. This main line is now introducing American locomotives of the Mallet type. English and German locomotives are also in use as well as coaches and rolling stock from the same sources. Many of the trucks are of Portuguese manufacture.

American manufacturers interested in the railways and port works of Mozambique Province should address communications and literature to A Direcção do Porto e dos Caminhos de Ferro, Lourenço Marquez, Portuguese East Africa.

AMERICAN-JAMAICAN TRADE EXTENSION.

[From Consul Nicholas R. Snyder, Kingston.]

With a possible "commercial exposition" in view, at which American manufactures might be displayed and thus brought to the attention of Jamaican tradespeople, I began interviewing leading Kingston merchants and one in particular, a wholesale hardware dealer who, I believed, imported little, if any, hardware from the United States. Inquiry developed that his warehouse was stocked with thousands of dollars' worth of American goods, such as carpenter's tools, ready-mixed paints, whips, harness, and nails. He said that he has recently begun to import corrugated iron roofing and wire fencing also, and stated that while American imports are not increasing by "leaps and bounds," they are steadily driving both British and German manufacturers to greater efforts to maintain the trade they have hitherto enjoyed.

The same may be said of the larger dry goods houses, to which were submitted samples (with prices) of a child's jumper suit made in one of the New England States. Notwithstanding many of them maintain a buyer in London, they have placed large orders with this New England manufacturer. Continuing my investigations, I found similar conditions existing among others of the leading merchants, and therefore concluded that a commercial exposition such as I had contemplated would not justify the expense it would entail.

If American manufacturers will (and some of them do) send out competent salesmen, their trade in the West Indies should develop greatly. During my residence as consul in this island I have seen a rapid growth in imports of American goods, regardless of the fact that freight rates from American seaports are the same as those from Europe, where the distance is two or three times as great. The United States supplies more than 45 per cent of Jamaica's imports and absorbs about 53 per cent of the island's exports. In my opinion the completion of the Panama Canal will materially increase the amount of Jamaica's imports from the United States.

[A review of Jamaica's foreign commerce was published in Daily Consular and Trade Reports on Aug. 24, 1911.]

SIAMESE RICE CULTURE AND EXPORT.

[From Vice Consul General Carl C. Hansen, Bangkok.]

More than 40 varieties of rice are cultivated in Siam. The "hill" rice is a peculiar variety planted on the hillsides in northern Siam, and is said to be marvelously productive. When ripe, the ears of this rice are black, but when husked and boiled the grains are of a reddish color and have a peculiar fragrance.

The "glutinous" rice is another variety grown in the mountain valleys of northern Siam, and forms the main food for the people of these regions, while white rice only is raised and used by the people on the plain of Lower Siam. A common kind of rice cultivated on land liable to floods during the rains is said to grow as much as a foot in 12 hours, so that the plant often attains a height of 10 feet in its efforts to keep its leaves above water.

Crops and Varieties.

The rice commonly raised in Siam consists of the so-called light crop, which is planted on irrigated land, often as early as February, and reaped in May or June; and the heavy crop, which is planted between July and September and harvested in December and January.

A prominent Siamese rice grower gives the following description of the rice supplied for export:

Rice that is exported can be roughly divided into three classes—Na Muang, Pasak, and garden rice. Na Muang is the cheapest quality and is grown chiefly in the district of Ayuthia. The grains are short and have a great deal of red rice mixed with them, and they are also very much cracked, therefore liable to be broken in milling. Pasak rice, which is of better quality than Na Muang, comes from the Pasak River district and is a variety of garden rice. It is only due to the soil of this district that it is of poorer quality than the ordinary garden rice. The so-called garden rice forms the main bulk of rice that is exported and is the best quality. Na Muang and Pasak rice is used for mixing with it. This rice was formerly grown in the ditches of vegetable gardens, but is now raised on vast tracts of land, both by broadcast sowing and transplanting processes, so that the name garden has lost its original meaning.

Rice Exhibitions—Declared Exports.

On account of the exhibitions of rice during the last three years, very fine varieties have been brought to the notice of cultivators. Many of the varieties exhibited are considered by experts to be among the best in the world.

The declared exports from Bangkok to the United States and Manila during the calendar year 1911 amounted to \$8,619 worth of white and \$25,095 worth of broken rice.

OIL-BURNING PLANT AT IRISH SHIPYARD.

[From the Belfast Evening Telegraph, forwarded by Consul Hunter Sharp, Belfast.]

In order to be independent of coal as a fuel, four large boilers at Harland & Wolff's Shipbuilding Works on Queens Island have been adapted for oil fuel. Using coal for fuel, one of these boilers evaporates 16,000 pounds of water an hour and the other three 12,000 pounds each, and with liquid fuel they will generate 4,000 horsepower per hour. The work of installation is so simple that it can be carried on without letting the steam out of the boilers.

The steam-jet system is used, which it is claimed will recover 68 to 74 per cent of the calorific value of the fuel used. The oil enters the boiler through a branch pipe and is given a whirling motion by the prolonged spiral stem of the valve spindle, the amount of oil being governed by a handwheel at the end of the spindle. The steam enters at another valve and passes through slots in the cylindrical part of the cone. All the oil passing through the burner is thus steam jacketed. One or two men can attend to a dozen boilers burning liquid fuel.

BELGIAN KONGO RUBBER.

[From Consul General Henry W. Diederich, Antwerp, Belgium.]

As the Belgian Kongo has become, almost overnight, one of the chief rubber-producing countries, Antwerp has naturally also become one of the rubber markets of the world. The importations of rubber into Antwerp amounted to 4,336 tons in 1911, as against 4,058 tons in 1910. Of these imports, 3,176 tons came from the Belgian Kongo in 1911 and 3,105 tons in 1910.

The Belgian Government is making a special effort to encourage to the utmost the cultivation of rubber in Kongo Free State. Three expeditions went out in 1911 to the district of the Equator and discovered several tracts which seemed to fulfill all the requirements necessary to the cultivation of the *Hevea brasiliensis* (Para rubber). At the same time, the planting of *Hevea* had already been tried in the five stations of the Bangala and in two stations of Stanleyville. Some of these plants, 10 years old, have now reached the period of seed bearing. Last year a large number of seeds were harvested and used immediately; the surplus seeds were held at the disposal of the natives and private individuals who solicited them. Experiments in tapping, recently made at the Botanical Gardens of Eala, on *Hevea* trees 6½ years old, gave 515 grams of dry rubber per tree. Other experiments in tapping made elsewhere also gave satisfactory results, for instance at Boma, Kitobola, Coquilhatville, Bambili, and Niangara. It was found that coagulating the rubber sap by plunging it in hot water still gave the best results and is much more effective than the slow process of allowing it to settle.

The cultivation of several other species of rubber trees is being experimented with, but none equals the *Hevea brasiliensis* in point of production, growth, and quality. It may therefore be taken as settled that the *Hevea brasiliensis* is the best adapted for cultivation wherever the rainfall is sufficient for its growth.

High-Grade Kongo in Demand.

With regard to Kongo rubber, there is a constant demand for the highest grades, which, however, are becoming very rare, and one of the first effects of free competition would seem to be a notable lessening in the care given to harvesting and coagulating the rubber. The greater part of the Kongo rubber imported into the Antwerp market comes from districts given up to private cultivation.

It is feared by rubber men here that incessant harvesting of rubber in the Kongo forests will impoverish the growth. Rubber experts therefore strongly advocate the systematic and well-organized planting of rubber trees, not only by the public authorities, but also by private individuals.

As yet the trade has not decided upon the best form in which the crude plantation rubber should be presented for sale. It comes now in sheets, disks, "crepes," blocks, etc., either smoked or natural. During 1911 the forms preferred were smoked sheets and light, thick crepes. However, the most difficult problem remains still to be solved, namely, the method of coagulation. It is agreed that adding the slightest quantity of acid deteriorates the mass and thus renders the quality of the rubber inferior to that of Para.

World Output—Plantation Rubber.

The subjoined table will show the approximate estimate recently made of the world's output of rubber for 1911:

Countries.	Tons.	Countries.	Tons.
Brazil, 1910 (Peru and Venezuela included).....	38,000	Liberia.....	36
Ceylon, 1911 (estimated).....	2,000	Malaysia.....	18,000
Kongo and Angola.....	10,800	Mexico.....	12,800
Costa Rica.....	90	British Nigeria.....	630
British East Africa.....	180	German Togoland.....	450
German East Africa.....	250	Siam.....	450
French Indo-China.....	5,500	British Sierra Leone.....	90
British Gold Coast.....	1,450	British Uganda.....	900
Gutana (British, French, and Dutch).....	900		
British India and Burma.....	250	Total.....	92,821
Borneo and Papua.....	45		

At present the trees on most of the new plantations in the East are too young to show fully what they can do, but it is expected that in a few years the plantations will produce an annual harvest of at least 50,000 tons. The conditions for work on plantations in the Malay States and the East are very different from those prevailing in the forests of South America, and are attended with no such danger to health. The rubber gathered from these new plantations can not yet replace the Para—for one thing, it lacks resiliency—but it is confidently hoped that with older trees and more scientific methods of gathering and coagulating the sap more perfect results will be obtained. In fact, it is expected that in the near future the new plantation rubber will equal the Para in every respect, and even now it comes into the market in a purer and better condition than does its rival from the virgin forests of South America.

[A pertinent review of the rubber industry appears in the article on the International Rubber Exhibition published in Daily Consular and Trade Reports on Aug. 10, 1911, and among numerous other reports on the subject were those published on Jan. 16 and Mar. 13, 1912.]

PROTECTION OF SHEFFIELD'S TRADE NAME.

[From Consul Charles N. Daniels, Sheffield, England.]

A committee of the Cutlers Co., manufacturers and workmen, formed with the object of preventing the improper use of the trade name of "Sheffield" has received the assistance of the board of trade in making its object known all over the world. It has arranged that a circular be sent out through the foreign office to the various British embassies and consulates abroad. The circular points out that, while the committee does not desire to embark upon a policy of fussy interference, it is most concerned to suppress fraud.

It is suggested that the British Government's commercial representatives abroad should make inquiries on the spot in all suspicious cases and report, if possible, direct to the Cutlers Co. the result of any action which they may take. Such action, it would appear to the company, would be usefully confined to inquiries into suspicious cases and to the purchase of samples which could be sent home to be examined by the experts of the Cutlers Co. to determine whether or not they were genuine or fraudulent.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8709. **Tenders for steel pipe.**—The American consul general at Vancouver, British Columbia, reports that tenders will be received by the city purchasing agent, Vancouver, until May 15, 1912, for 2,000 lineal feet of 18-inch lap-welded wrought-steel water pipe and 13 double gate valves with flange ends. Specifications and blank tender forms may be obtained from the city purchasing agent.
- No. 8710. **Marine insurance agency.**—A business organization in the Levant writes that several British and German marine insurance companies have been established in that region for some years, and they are doing a good business. At present not an American company is represented there, and it is believed by this organization that a good business can be done if satisfactory arrangements can be made with some reliable American marine insurance company.
- No. 8711. **Representation in western Canada.**—An American consular officer reports that a business man in his district contemplates opening a general commission business in a certain city, and he desires to be put in touch with American manufacturers who desire representation in western Canada.
- No. 8712. **Blades for safety razors.**—There seems to be an excellent opportunity in a certain foreign country for the sale of American safety razor blades if direct connections can be made, thus obviating certain unsatisfactory conditions at present existing. An American consul reports that the sale of this line of goods has fallen off considerably in his district because of the conditions above referred to. Copy of the complete report, containing further detailed information, can be obtained upon application to the Bureau of Manufactures.
- No. 8713. **Power sheep-shearing machines.**—A report from an American consular officer in South Africa states that a prominent and enterprising engineering firm in his district wishes sole agency for power sheep-shearing machines. Correspondence regarding this matter should be addressed to the consular officer submitting the report.
- No. 8714. **Canary whitewood lumber.**—An American consul in the United Kingdom reports that a large firm of lumber dealers in his district, which acts as agent for Norwegian, Swedish, and Russian shippers of various kinds of lumber, is desirous of obtaining the names of first-class reliable shippers of canary whitewood lumber from the United States. This firm states that it often receives inquiries from its customers for this class of lumber, which is said to be shipped in large quantities by American firms.
- No. 8715. **Silk hosiery.**—A business man in Canada informs an American consular officer that he desires to communicate with American manufacturers of high-grade hosiery, especially silk hosiery.
- No. 8716. **Frozen turtle.**—An inquiry has been received by an American consulate in a South American country for the names of firms in the United States dealing in frozen turtle. The firm making this request desires to export frozen turtle to the United States.
- No. 8717. **Woodenware and hardware.**—An American consul in the United Kingdom reports that a local merchant who handles American and Canadian woodenware is open to buy on his own account wooden handles, all other kinds of woodenware and hardware lines, or to represent American firms producing such goods. He states that he can command a good trade in competitive lines among the leading jobbers and manufacturers of the United Kingdom, as he has business connections of many years' standing with all the important houses in this line throughout the country over which he travels regularly. He also looks after the presentation and collection of drafts, documents, etc., if desired, and is willing to take care of and distribute carloads of goods arriving at British ports at low forwarding rates.
- No. 8718. **Men's furnishings.**—A commission firm informs an American consular officer that it desires to be put in touch with American manufacturers of men's furnishings who desire a representative in western Canada.

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FOREIGN TARIFFS.

ARGENTINA.

Rates of Duty on Sugar.

Consul General R. M. Bartleman, Buenos Aires, has transmitted a copy with translation of a law of February 21, 1912, which establishes new rates of duty on sugar, in effect from June 1, 1912. The law provides for the imposition of specific rates of duty, which are to be gradually reduced from 1912 to 1921. The duty applicable from June 1, 1912, on sugar of not less than 96° of polarization is 0.088 peso per kilo (about 4 cents per pound); on unrefined sugar, or sugar of less than 96° of polarization, 0.068 peso per kilo (about 3 cents per pound). After that year until 1921 the annual reduction on both the refined and the unrefined is to be 0.002 peso per kilo (peso = 96.5 cents; kilo = 2.2046 pounds). The present rates on the grades of sugar mentioned above are 0.09 and 0.07 peso per kilo, respectively.

AUSTRALIA.

[From Consul General John P. Bray, Sydney, Feb. 16, 1912.]

Proposed Reciprocity with Canada.

The following letter, addressed to the Prime Minister of Australia by the Minister of Customs of the Dominion of Canada, has been made public:

Since 1898 our two countries have been endeavoring from time to time to arrive at an agreement for better mutual trade relations between our countries, but so far without success. In the meantime Canada has admitted the British colonies, including the West Indies, as also the Dominions of South Africa and New Zealand, to the advantages of her British preferential reduction over nonpreference countries and which amount to about 30 per cent of duty. A return has been accorded by South Africa and New Zealand and negotiations are now going on for a preferential return from the West Indies with fair prospects of success. It seems to me too bad that with our great sister Dominion in the Pacific we have not been long since able to arrange our trade on a preferential basis, and I can assure you that Canada is very desirous, both on sentimental grounds and for reasons of mutual advantage, that this anomaly shall be removed as speedily as possible. We give you already a considerable free list for some of your staple products, although we get no very great return from you

in that respect for any of our great staples. We stand ready to give you a substantial preference upon all articles of export in return for a substantial preference to our exports to your country, and a free entrance for some of our natural products. Proposals have been made to exchange your limited preference for a limited preference of entry into our country, but it scarcely seems adequate that we should proceed on such a restricted basis. Can we not at least approach the matter with a clear desire and a determination to come to some fair agreement, and thus bind our two countries closer together on the lines of commercial intercourse and exchange? If your Government will make a proposition, I shall be very pleased to take it up with my colleagues and to pursue the negotiations with you to a finish, and I don't see why we should not come to conclusions which would be mutually advantageous.

Once preferential inducements are added, our steamship communications can be bettered, and by this means our two kindred people will become more intimately acquainted with and interested in each other. If, on the other hand, you wish Canada to make a proposition to you with the assurance that you desire to follow it to a completion, I shall be glad to place a proposal before you for consideration. May I hope to hear from you in good time. Our Mr. Ross will give you any desired information as to our products, our exports, and imports.

The matter referred to in the above letter has been considered by the Commonwealth Cabinet and a reply has been sent to the Canadian minister to the effect that the Commonwealth Government is prepared to enter into negotiations for a reciprocity agreement, and to that end, if it was considered necessary, Australia would send a representative to Canada. The terms proposed by the Commonwealth have not been made available.

[From report by Consul General Bray, Mar. 4, 1912.]

After representations by firms engaged in the exportation of butter and frozen meats to Canada, the Minister for Trade and Customs of the Commonwealth has expressed a willingness to expedite an agreement for better trade relations between the Commonwealth and Canada. It was pointed out that since the New Zealand-Canadian subsidy to the Union Steamship Co. had been entered into (July 1, 1911), whereby New Zealand had first claim on refrigerator space, not a single case of butter had been shipped to Canada from Australia.

The duty on Australian meat in Canada is at the rate of the general tariff, 3 cents per pound, while meat from New Zealand is entitled to the British preferential rate of 2 cents per pound; Australian butter is subject to a duty of 4 cents per pound, while New Zealand butter pays only 3 cents per pound. Negotiations have been opened with Canada, and it is thought probable that an early agreement of reciprocity will result.

AUSTRIA-HUNGARY.

Commercial Treaty with Montenegro.

The commercial treaty between Austria-Hungary and Montenegro, signed in 1911, was ratified in February of 1912, and March 4, 1912, ratifications were exchanged between the two powers. The treaty came into effect eight days after the exchange of ratifications, and is to remain in force through the calendar year 1917, or, if not denounced previously, until 12 months after the date of denunciation.

The treaty guarantees mutual most-favored-nation treatment, and provides for the free admission from Montenegro, for consumption in the district of Cattaro, of 6,000 head of bovine cattle, 20,000 head of sheep, goats, etc., and 100 metric tons of smoked meat, known as "castradina," per annum.

CANADA.

[From Consul General John E. Jones, Winnipeg.]

Invoice Requirements.

This office has been called upon recently in several instances to smooth out difficulties between the Canadian customs authorities and American shippers. In each instance, after investigation of the facts, it was found that the American manufacturer had not strictly complied with the Canadian regulations governing invoices of goods from foreign countries. It therefore seems important to me at this time to call the attention of American manufacturers to the requirements of the Canadian customs law. To this end, I beg to call attention to the following form, with special reference to the column headed "Fair market value as sold for home consumption at time shipped." Evidently this clause is not distinctly understood. It means that in this column the American manufacturer must place the price at which similar goods are sold in like quantities in the markets of the United States. This is intended as a safeguard in connection with the dumping clause, which is also given below.

The following is a specimen form of invoice approved by Canadian customs, January, 1910, for goods sold by exporter prior to shipment:

(Place and date) —, —.

Invoice of —, purchased by —, of —, of —, from —, of —, to be shipped per —.

Marks and numbers on packages.	Quantities and description of goods.	Fair market value as sold for home consumption at time shipped.	Selling price to purchaser in Canada.	
			@.	Amount.

The dumping clause in part reads as follows:

In the case of articles exported to Canada of a class or kind made or produced in Canada, if the export or actual selling price to an importer in Canada be less than the fair market value of the same article when sold for home consumption, in the usual and ordinary course in the country whence exported to Canada at the time of its exportation to Canada, there shall, in addition to the duties otherwise established, be levied; collected, and paid on such article, on its importation into Canada, a special duty (or dumping duty) equal to the difference between the said selling price of the article for export and the said fair market value thereof for home consumption; and such special duty (or dumping duty) shall be levied, collected, and paid on such article, though it is not otherwise dutiable: *Provided*, That the said special duty shall not exceed 15 per cent ad valorem in any case.

When an American shipper—or, in fact, any other foreign shipper—fails to include the price charged for similar goods for home consumption, the customs authorities raise the total value of the invoice 25 per cent, and upon this added valuation assess the duty. This does not mean that the shipper will lose the added duty; for if he is able to prove to the satisfaction of the department of customs that an error has been made in the compilation of his invoice and then furnishes the information required, the additional duty is refunded. While this omission looks, upon the face of it, like a small matter, it has resulted in serious inconvenience to the buyers of American-made goods in Canada; and the attention of manufacturers and ship-

pers generally is respectfully called to the importance of supplying all the information required by the Canadian customs.

American manufacturers who are not conversant with the Canadian customs requirements are further referred to Tariff Series No. 24, "Consular Regulations of Foreign Countries," issued by the Bureau of Manufactures.

CHILE.

[From Diario Oficial, Chile, Feb. 12, 1912.]

Classification of Lubricating Oil.

By a decree of the Government of Chile it is determined that mineral lubricating oil, even when it contains some addition of other substances, such as vegetable oil or animal oil, shall be dutiable under tariff No. 1792, at the rate of about 50 cents per 100 pounds, which is imposed on fixed oils, not refined, for lubricating machinery.

This decree settles a question which had arisen in the administration of the customs, as to whether or not the addition of vegetable or animal material would serve to change the classification of oil which would otherwise fall under the provisions applicable to paraffin, petroleum, and kerosene oils.

COLOMBIA.

[From Diario Oficial, Colombia, Jan. 22, 1912.]

Importation by Parcel Post.

The Government of Colombia has recently decided in the negative the question which arose as to whether articles for which a special exemption from duty had been granted should be entitled to such exemption if the importation took place through the mail. The particular occasion was in connection with the importation of supplies, implements, and sundries for use in a match factory, special exemption from customs duties having been granted for such articles. The Ministry of the Treasury decided that they should be entitled to free importation only when imported through the customhouse, owing to the fact that the post offices are not under the same department of the Government as the customhouses, and can not be made subject to the same regulations. This ruling has bearing on the importation of material by railroad, navigation, or manufacturing companies on which special exemptions from duty have been accorded, and duty will accordingly be payable when importation is made through any office other than the customhouse.

ITALY.

[From report of Consul General James W. Smith, Genoa.]

Duty on Dredges and Tugboats.

By a decree of February 25, 1912, dredges and decked tugboats are made free of duty on importation into Italy. Dredges were formerly dutiable at 37.50 lire or 17.50 lire per gross ton (in addition to duty charged on motive machinery) depending on the material of the hull. Decked tugboats were not previously mentioned in the customs tariff. [Lira = \$0.193.]

SWEDEN.

[From a report of the Danish consul general in Stockholm, reprinted in Meddelelser Fra Oplysningskontoret, Christiania, Mar. 9, 1912.]

Proposed Reduction of Duties.

A number of private bills have been introduced in the lower house of the Swedish legislature calling for tariff revision downward. One bill introduced by 10 members of the house contemplates general reduction or abolition of the customs duties on food products. Another proposal is the abolition of the duty on bacon (bacon is imported chiefly from America). In yet another bill the reduction of the duties on oatmeal and groats is proposed.

In the proposal to abolish the duty of 0.60 crown per 100 kilos (7 cents per 100 pounds) on cement, it is asserted that the present duty allows the Swedish cement manufacturers to charge abnormally high prices for their product, and that protection is unnecessary for the industry, which has become firmly established.

It is proposed to abolish the duty on chloride of lime, at present 1 crown per 100 kilos (12.2 cents per 100 pounds). This duty was originally imposed to protect the chemical industry, but has proved a serious hindrance to a greater industry, namely the manufacture of paper and wood pulp, in which chloride of lime is an important bleaching agent. An alternative proposal is that, instead of abolishing the duty, provision be made for the payment of drawback on the exportation of wood pulp bleached with imported chloride of lime.

It is also proposed to abolish the duty on iron plates coated with pure or mixed lead of a thickness of less than one-fourth of a millimeter. Such plates were duty free before the last revision of the tariff, when they were subjected to a duty of 7 crowns per 100 kilos (85 cents per 100 pounds), the rate applicable to other iron plates. These plates are used especially in packing matches for exportation. This proposal was discussed and was further recommended by the committee to which it had been referred.

BRUSSELS SUGAR CONVENTION.

[Documents transmitted by American Minister Larz Anderson, Brussels.]

The Governments of Germany, Austria-Hungary, Belgium, France, Luxemburg, Netherlands, Peru, Russia, Sweden, and Switzerland, having decided to maintain in force after August 31, 1913, the international union constituted by the Brussels sugar convention of March 5, 1902, signed on March 17, 1912, a protocol giving stability to the organization until August 31, 1918. The main point at issue in the recent conference was the amount of sugar which Russia should be allowed to export annually. In 1907, when Russia first became a party to the convention, it was agreed that during the following campaign year Russia should be allowed to export 300,000 tons of sugar to countries where such sugar would come into competition with the sugar produced by the other signatory countries, and for each of the following four campaign years the exportation of Russian sugar to such countries was limited to 200,000 tons. At the present conference Russia has succeeded in having its annual export quotas increased as follows:

In accordance with article 2 of the protocol, the export quota of 200,000 tons accorded Russia by article 3 of the protocol of December 19, 1907, for each of the four years

from September 1, 1909, to August 31, 1913, is maintained for each of the five years from September 1, 1913, to August 31, 1918.

Taking into consideration the fact that in consequence of exceptional circumstances in 1911-12 a scarcity of sugar and at the same time a considerable increase in the price of sugar in the world market are to be observed, the contracting States give their consent that Russia shall be allowed to export a special extra quota, to be divided as follows: For the campaign year 1911-12, 150,000 tons; for the campaign year 1912-13, 50,000 tons; for the campaign year 1913-14, 50,000 tons.

The distribution of the extra quotas of 50,000 tons each for the campaign years 1912-13 and 1913-14 is further limited, so that during each of the four six-months periods included the exportation of Russian sugar shall not exceed 25,000 tons.

Article 4 of the protocol makes provision for the possible continuance of the convention after 1918 as follows:

In the session which precedes September 1, 1917, the permanent commission will enact by unanimous vote the course to be followed by Russia in case she should be disposed to continue her participation in the convention after September 1, 1918. In case the commission can not agree, Russia will be considered to have denounced the convention, as from September 1, 1918.

This protocol, signed by the representatives of the various Governments, was to be ratified before April 1, 1912, and was to take effect on that date upon ratification by at least the following European sugar-exporting countries: Germany, Austria-Hungary, Belgium, France, the Netherlands, and Russia.

CORPORATION LAW OF ARGENTINA.

[Transmitted by Chargé d'Affaires Robert Woods Bliss, Buenos Aires.]

The following law, promulgated February 6, 1912, fixes requirements to be fulfilled by corporations doing business in Argentina:

The corporations referred to in article 287 of the Commercial Code [i. e., foreign corporations] may do business in Argentina without the previous authorization of the Government, provided that they establish before competent judicial authorities the fact that they are constituted in accordance with the laws of the nation in which they are organized, and file in the Public Commercial Register copies of their charters and other fundamental documents.

The above provisions shall be in effect from the date of the promulgation of this law for corporations organized in countries extending reciprocal advantages to corporations of Argentina.

Consular Trade Conferences.

Consul General Thomas Sammons, at Yokohama, Japan, who has been granted 60 days' leave of absence, reports that he expects to arrive on the steamship *Manchuria*, at Honolulu, Hawaii, on May 21, 1912, and at San Francisco about May 27. The consul general states that he will be glad to confer with commercial bodies and business houses in the cities mentioned, as well as at other points, so far as practicable.

New Sawmills in British Columbia.

Consul General D. F. Wilber, of Vancouver, calls attention to the many notes on the proposed construction of new sawmills in British Columbia, as published by the *Western Lumberman*, a journal edited in Vancouver, but published in Winnipeg. Mr. Wilber has collated lists of these enterprises, copies of which may be secured from the Bureau of Manufactures at Washington, D. C.

INTERNATIONAL CONGRESSES IN UNITED STATES.

Three international congresses have accepted invitations to hold their meetings in the United States in 1912 and one in 1914. These are: 1912—Eighth International Congress of Applied Chemistry, September 4 in Washington, September 6 to 13 in New York, extensive arrangements having also been made for touring the country and visiting factories and works where chemistry is applied to production; Fifteenth International Congress on Hygiene and Demography, September 23 to 28, to which delegates have been appointed by 23 foreign nations and 29 American States; 1914—Second Pan American Scientific Congress, whose transactions are not restricted to any special branch, but range over the whole field of scientific inquiry; the date has not as yet been definitely fixed.

Other international congresses to be held in the United States this year, and mention of which has already been made in Daily Consular and Trade Reports, are the Waterways Congress, Philadelphia, May 23 to 28, the International Congress of Chambers of Commerce, Boston, September 24 to 28, and the conference of rubber producers and manufacturers in connection with the Third International Rubber and Allied Trades Exposition in New York September 23 to October 3, 1912.

BURMA RUBBER EXHIBIT IN NEW YORK.

[From Consul General William H. Michael, Calcutta.]

The Lower Burma Rubber Planters' Association has decided to place an exhibit in the forthcoming New York Rubber Exposition. The expenses of the exhibition and of sending a representative to New York would amount to \$2,330, of which the local government will probably contribute \$1,330, for which the sanction of the Government of India is required. The balance is to be raised by private subscriptions. It is suggested that the stall should be a typical Burmese exhibit, carved teakwood posts and canopy, a pagoda hung with rubber, and a pamphlet about Burma as a rubber-growing country with photographs of the different estates, etc.

The present conditions of land tenure for rubber in Burma are eight years' free tenure, afterwards a rent per acre of any amount up to a maximum of \$8.30. The Lower Burma Rubber Planters' Association will ask the Government to fix the rent at a definite rate, as a possibility of the maximum being imposed, it is claimed, has seriously handicapped the rubber industry by frightening away capital. There is an alternative suggestion of an ad valorem duty being imposed. This, it is feared, would affect the producing estates considerably, and from their point of view the maximum rent would be preferable. At present there is no guaranty from the Government that an ad valorem duty will not be imposed in connection with the rent of \$8.30 per acre.

A press notice from Consul General John P. Bray, of Sydney, states that the Government of New South Wales has sent Mr. Nielsen to attend the National Irrigation Congress at Chicago, and to investigate the suggested establishment of a New South Wales commercial agency on the Pacific coast.

FORWARDING AGENT A FACTOR IN TRADE.

[From Consul William F. Doty, Riga, Russia.]

During 1911 exports from the port of Riga, according to a provisional estimate of the local chamber of commerce, had a gross value of \$97,279,843, or \$1,482,026 less than in 1910. The value of goods shipped by the 10 leading forwarding houses in the city was \$54,698,391; but this amount does not represent the entire share taken by these firms in the outward trade from this and other Russian ports, as many even of those exporters who ship in their own name employ a forwarding agent to take charge of the transportation of their goods.

Exports to the United States.

The large exports to the United States declared by local dealers at the Riga consulate during the last few years are likewise to be accounted for by the action of this forwarding trade, which has financially assisted Riga firms to extend their transactions much beyond the former limits. Proof of this statement is furnished by the annexed table showing the shares taken by local firms and by concerns outside this consular district, but whose wares were sent hither for shipment, in the cargoes of hides and skins declared for export to the United States in the calendar year 1911:

Hides and skins.	Moscow.	Warsaw.	St. Petersburg.	Riga.	Foreign countries.	Total.
Calf.....	\$461,461	\$52,287	\$26,888	\$4,526,657	\$1,271,251	\$6,337,544
Colt.....	75,012			175,704	316,208	566,919
Cow.....	1,551		11,539	83,801	76,017	172,908
Goat.....	439,179			84,642	148,000	671,821
Horse.....	356,608			207,111	148,768	712,485
Sheep and lamb.....	402,458			72,932	256,151	741,539
Total.....	1,736,267	52,287	37,427	5,150,847	2,226,388	9,203,216

Similar results would be shown by tables giving the values of the other leading articles of Russian export, such as flax, hemp, etc.

Favorable Terms—Banks.

The terms offered to the export trade by the forwarding houses are considered as being more favorable than the loans granted by the Riga banks, which vary from 50 per cent of the current market value on hides and skins to 75 per cent on flax and similar fibers. A pro forma list of charges incurred by exporters in shipping through forwarding firms accompanies this report [and will be loaned by the Bureau of Manufactures].

Most of the forwarding houses established at Riga are branches of well-known Russian transportation companies, but work with their own capital. The smaller houses are dependent upon the local banks for advances to clients.

Banking facilities at Riga have largely increased during the last five years, as in addition to the original three establishments founded by the city and local merchants to assist foreign commerce, four large Russian banks have opened branches here, and others are reported to be considering the expediency of a similar step.

In explanation of the conditions governing in the foreign commerce of Riga it may be added that the port is more favorably situated for the export trade to the United States than points farther inland, as

the consular invoice can be obtained the day the merchandise is loaded aboard the vessel and the other shipping documents procured therewith and the draft likewise immediately drawn without the delay and loss of interest to the exporter, such as would be incurred by requiring the invoice to be consulated at other cities.

SULPHUR MINED BY PUMPING.

[Announcement of United States Geological Survey.]

Seven or eight years ago the imports of Sicilian sulphur amounted to more than 100,000 long tons. With the growth of the sulphur industry in Louisiana the imports of Sicilian sulphur in the United States have become almost a negligible quantity, the entire imports from Italy for 1910 being but 10,704 tons. The production of sulphur in the United States for 1910 was 255,534 tons, valued at \$4,605,112, the great bulk of which came from Louisiana.

The mining of sulphur in Louisiana is an interesting process. The sulphur deposit, situated near Lake Charles, lies about 440 feet beneath the surface and is about 100 feet thick. Beds of quicksand overlying the sulphur render the sinking of shafts impossible, and the sulphur is therefore pumped to the surface. A well is driven through the numerous strata to the sulphur-impregnated beds in much the same manner as is usual in sinking wells for oil and gas. In each well there are placed concentrically four lines of pipe, having diameters ranging from 10 inches to 1 inch. Superheated water and hot air are forced down the pipes and the spaces between them to melt the sulphur and to bring it to the surface. The hot water flows down between the two outer pipes, which are respectively 10 inches and 6 inches in diameter, and passes into the sulphur-bearing mass, melting the sulphur. The quantity of sulphur melted and the range of action of the water depend on the temperature of the water and on the pressure at which it is supplied. The heavy melted sulphur runs back into the sump around the bottom of the well pipe, which it enters through holes provided for this purpose. Hot compressed air is forced down through the smallest or 1-inch pipe, and at the bottom of the well mixes with the melted sulphur and forms an aerated mass sufficiently low in specific gravity to allow the water pressure to elevate the melted sulphur to the surface, where it is discharged into large rectangular vats, constructed of rough planking. The dimensions of the vats vary somewhat, but they are made as large as 350 by 250 by 40 feet, and some of them are so arranged that railroad trains can pass between them. After the sulphur has cooled and solidified it is regularly mined the same as if it were a natural deposit.

PERMISSIBLE EXPLOSIVES FOR COAL MINES.

[Announcement of Bureau of Mines, Department of Interior.]

Encouraging progress in the use of permissible explosives in the coal mines of the United States is noted in Bulletin 10. Many of the fatal accidents in coal mines have resulted from the use of explosives for breaking down coal. These accidents have resulted both from the use of explosives that were not suitable and from the careless or improper use of suitable explosives. Investigation has shown that one of the commonest causes of disastrous explosions in the coal mines in this country has been a blown-out shot of black blasting powder or dynamite. The dangers that attend the use of these explosives were perceived several years ago, and in consequence the attention of powder manufacturers was directed to the production of explosives that would be less liable to ignite inflammable gas or dust. The manufacturers have been so successful in their efforts that it is now possible to obtain explosives which yield much shorter and quicker flames than black blasting powder or dynamite, and hence are much less dangerous to use in fiery or dusty coal mines. These explosives are termed permissible explosives. An explosive is termed a permissible explosive when it is similar in all respects to the sample that passed certain tests by the Federal Bureau of Mines and when it is used in accordance with the conditions prescribed by the bureau.

The permissible explosives are cleaner and much more convenient to use and handle than black powder. Moreover, they can be prepared and fired much more quickly.

Copies of this bulletin and also Miners' Circular No. 6, Permissible Explosives Tested Prior to January 1, 1912, and Precautions to be Taken in Their Use, are now ready for distribution and may be obtained free by applying to the Director of the Bureau of Mines, Washington, D. C.

TELEGRAPH SYSTEMS OF THE WORLD.

[From Consul General Robert P. Skinner, Hamburg, Germany.]

It is impossible to separate the figures relating to the Government ownership and operation of telegraphs, posts, and railways in Germany in such manner as to make a satisfactory comparison with the results of the privately owned telegraph lines in the United States. The published statistics of the German Empire show that the cost of operation, maintenance, and extension of the German system of posts and telegraphs was as follows during the fiscal years named: 1911, \$153,202,218; 1910, \$148,157,180; 1909, \$146,086,089.

It must be recalled, however, that the offices in which telegrams are received and forwarded are also post offices, that the system of wires follows publicly owned railway lines as a rule, and that the railways are enabled to transmit and receive service messages over wires which cost nothing to the land transportation system.

The number of telegrams received for transmission in Germany in 1909 was 46,802,000 and the number delivered in the same year was 44,800,000. The number of messages received and delivered increases in a fair degree of uniformity. The number of messages received in 1905 was 42,647,000 and the number delivered in that year was 41,479,000.

Statistics in regard to the operation of publicly owned telegraph systems are prepared at Berne, Switzerland. Unfortunately figures relating to the privately owned systems in the United States are not received by the Berne bureau and accurate comparisons therefore can not be made. In the preparation of the following table, to the details of 1910 supplied by the international bureau at Berne are added certain figures relating to the operation of the Western Union and the Postal companies in the United States, taken from page 272 of the World Almanac:

TELEGRAPH SYSTEMS.

Countries.	Number of offices.	Length of lines.	Length of wires.
United States:		<i>Miles.</i>	<i>Miles.</i>
Western Union	24,926	219,219	1,487,345
Postal	33,808	63,874	390,139
Germany	41,276	180,592	1,086,828
Austria	4,700	27,586	137,993
Hungary	4,199	15,357	86,850
Roumania	3,058	4,820	13,537
Bulgaria	293	3,668	7,456
Turkey	1,095	27,607	46,626
Egypt and Sudan	321	8,554	23,234
Italy	7,315	31,958	158,546
Switzerland	2,255	4,648	29,651
France	18,595	110,205	408,839
Algeria	690	9,293	23,993
Tunis	177	2,575	8,916
Spain	1,724	21,756	49,909
United Kingdom	13,575	57,844	408,010
Belgium	1,561	4,749	25,982
Holland	1,302	4,551	21,801
Luxemburg	296	433	1,252
Denmark	547	1,213	7,601
Sweden	2,660	6,197	19,844
Norway	1,404	12,456	42,153
Russia	3,457	119,187	416,073
Argentina	2,404	35,056	92,837
Brazil	2,004	18,270	33,690
British India	7,001	74,710	290,556
Dutch Indies	582	9,021	12,185
Japan	3,866	29,781	144,468

¹ Exclusive of 118 offices, 3,910 miles of lines, and 5,475 miles of wires in protected territory.

TELEGRAMS.

Countries.	Total.	Interior.	Inter-national.	Official.
Germany.....	54,099,000	34,290,000	17,812,000	1,997,000
Austria.....	19,837,000	9,184,000	8,777,000	1,876,000
Hungary.....	10,896,000	5,985,000	4,100,000	810,000
Roumania.....	2,837,000	1,898,000	922,000	117,000
Bulgaria.....	1,737,000	1,348,000	300,000	89,000
Turkey.....	7,161,000	5,666,000	1,110,000	379,000
Egypt and Sudan.....	5,627,000	2,314,000	75,000	3,238,000
Italy.....	16,367,000	12,334,000	3,108,000	927,000
Switzerland.....	5,128,000	1,572,000	3,370,000	184,000
France.....	60,635,000	47,673,000	9,576,000	3,486,000
Algeria.....	2,881,000	2,490,000	101,000	320,000
Tunis.....	981,000	343,000	544,000	94,000
Spain.....	5,606,000	3,887,000	1,518,000	201,000
United Kingdom.....	89,105,000	75,404,000	13,701,000	.....
Belgium.....	7,738,000	3,577,000	3,896,000	268,000
Holland.....	6,333,000	2,953,000	3,305,000	75,000
Luxemburg.....	203,000	39,000	153,000	11,000
Denmark.....	3,063,000	903,000	2,079,000	81,000
Sweden.....	3,953,000	1,791,000	1,978,000	184,000
Norway.....	3,384,000	1,760,000	1,104,000	520,000
Russia.....	30,195,000	22,803,000	4,247,000	3,145,000
Argentina.....	8,277,000	6,137,000	855,000	1,283,000
Brazil.....	2,278,000	2,007,000	128,000	143,000
British India.....	13,761,000	12,083,000	1,638,000	40,000
Dutch Indies.....	1,044,000	733,000	241,000	70,000
Japan.....	29,925,000	24,363,000	1,782,000	3,780,000

¹ Service telegrams.

BUSINESS NOTES FROM FINLAND.

[From the Mercator, Helsingfors.]

A new bobbin factory has been established at Tavastehus.

A new biscuit works at Abo, Finland, is equipped for a daily production of 1,000 kilos.

A steel-pen factory just started at Helsingfors is the first enterprise of the kind in Finland.

A shoe factory is starting in Finland with modern machinery, with a daily output of 500 pairs. Workmen largely subscribed the \$20,000 capital.

Finnish customs' receipts in 1911 aggregated \$10,238,000, against \$9,798,600 in 1910. State railway receipts reached \$9,558,000, having been \$8,494,000 in 1910.

Harbor works.—The senate has approved the decision of the Kotka town council as to a new loan for \$500,000, for enlarging the harbor and to convert some earlier loans.

Sawmill combine.—We understand there are plans on foot for joining all the Ulca-borg sawmills, viz, Toppila, Korkeasaari, Varjakka, and Pateniemi, under one management. The management will be entrusted to Th. Sohlberg and R. Weckman.

Banking profits.—Last year's banking operations were very favorable, the net profit being larger than for any previous year. The profits of Finland's Bank for the last five years were: 1907, \$1,098,574; 1908, \$1,524,006; 1909, \$1,229,318; 1910, \$1,567,042; 1911, \$1,644,699.

New industrial bank.—The Lansi Suomen Osake Pankki, capital \$200,000, is being established at Abo, its chief aim to procure credit for small landholders and for small trade and industrial enterprises. The shareholders' dividends are to be restricted to 8 per cent. Part of the profits will be used for promotion of trade.

Private-bank dividends for 1911 are as follows: Kansallis-Osake-Pankki, 15 per cent; Nylands Bank, 11 per cent; Wasa Aktie Bank, 8 per cent, all these being the same as for 1910. Privatbankern is paying 13 per cent, against 12 per cent in 1909 and 1910. Abo Aktiebank is paying 9 per cent, against 8 per cent for 1910; Tammerfors Aktiebank, 7 per cent, against 6½ per cent in 1910; Foreningsbanken 11 per cent, against 10 per cent in 1910; and Suomen Kauppapankki 4½ per cent, against 4 per cent in 1910, 3½ per cent in 1909, and 3 per cent in 1908.

POPULATION OF BARODA.

[From Consul General William H. Michael, Calcutta, India.]

The Gaekwar of Baroda has just issued a report covering the industrial and commercial progress of his dominions, which is of interest to Americans because of the fact that the Gaekwar and his wife have visited the United States, and the further fact that the most important department of the State is under the administrative direction of an American and the highest Barodan institution of learning has an American at its head.

Baroda is a native State of British India, in Gujerat, whose area in round figures is 8,000 square miles and whose population numbers more than 2,000,000. Over four-fifths of this population, or 1,697,146 are Hindus; the Mussulmans number 160,887, or less than one-tenth of the population; tribes or castes, low in civilization and returned as "Animistic," embrace 115,411, and there are 43,462 Jains, 7,955 Parsis or Zoroastrians, and 7,203 Christians. According to the census of 1911, the population may be further classed thus, according to occupation: Agriculture, etc., 65.6 per cent; industry, 12.3 per cent; transport, 0.8 per cent; trade, 6.4 per cent; force, 1.3 per cent; public administration, 1.9 per cent; professions and liberal arts, 3.7 per cent; persons living on their income, 0.4 per cent; domestic service, 0.2 per cent; insufficiently described occupations, 0.7 per cent; unproductive, 0.4 per cent.

In the matter of education Baroda is one of the most forward and enlightened States in India. Education is compulsory; yet, in spite of this, only 10 per cent of the population are literate. It is quite evident from the report that any illiteracy that may exist is not the fault of the Gaekwar's Government, for that administration is so anxious for education that it has actually provided boarding schools where children from the forest tribes can be housed and educated. In fact, the Gaekwar is educating the depressed classes alongside of the "high-caste" children, promising reward to those who stand highest in their studies and in efficiency.

AERIAL ROPEWAYS FOR TIMBER HAULAGE.

[From British and South African Export Gazette.]

Aerial cableways have been used for many purposes and with varying success in different parts of the world, but probably unique in its way is the installation for timber transport at the New Hornow mills, in the Usambara Mountains of German East Africa, and its success during the last 18 months is likely to encourage the provision of similar devices in other colonial timber regions where transport difficulties exist. The distance covered by the installation mentioned is upwards of 5 miles, that is, from the sawmills on the edge of the forest, situated at an altitude of 5,220 feet, and the nearest railway station, between 70 and 80 feet above the sea level. A log road or other surface line was out of the question in such a descent, especially as the rock is of a treacherous character. How steep the cableway is in parts may be gathered from the fact that between the two angle stations the gradient is actually 41°, which has been rarely exceeded anywhere in the world. Along this cable rough or sawn logs up to 46 feet in length, and weighing 1 ton, make their way down the mountain side to the railway station, and rails and other loads are hauled up to the sawmills.

The construction of the cableway was an engineering feat of no ordinary kind, and necessitated the erection not only of two angle stations mentioned but also of two tension towers, and it is to be noted that some of the supporting towers are of considerable height, one actually being as high as 100 feet. Steel had to be used throughout owing to the danger of wood-destroying ants, but it is interesting in view of similar installations which may be put up that the whole work was carried out by unskilled native labor under the direction of the European engineers.

KOREAN COMMERCIAL NOTES.

[From Consul General Geo. H. Seidmore, Seoul, Chosen.]

Clocks and Watches.

Imports of clocks and parts thereof amounted, according to the advance customs statement, to \$22,717 in 1911; the importations of watches for the same period totaled \$5,274. The industry presents many possibilities in Chosen, and there is a steady increase in the sales of these articles. The great majority of the clocks imported are of Japanese manufacture. The type usually sold is a small wall clock, which can be obtained for \$1 to \$3. American-made clocks are in small demand here. The watch trade, however, is largely American, though some Swiss watches are also sold. The market seems about equally divided between the Elgin and Waltham companies, whose watches sell for about \$5 to \$10 each.

Government Encouragement of Sericulture.

Since the Japanese annexation of Chosen, special attention has been given by the Government General to fostering sericulture [see Daily Consular and Trade Reports for July 1, 1911]; 116 sericultural training institutes have been established and a large staff of itinerant lecturers maintained. While official returns place the cocoon production of the Korean peninsula at about 70,000 bushels, it is estimated that the real production would possibly be somewhere near 150,000 bushels. The Korean cocoon is said to be inferior to the Japanese, and 13,000 sheets of Japanese eggs have been distributed to the Provinces, while large numbers were imported by private firms to improve the quality of the Korean output, the total number possibly reaching 30,000. The authorities have decided to build a stock manufactory in Chosen, which will be able to supply 3,000 sheets during the coming fiscal year and 10,000 sheets in the following year. In south Hamkyong Province a warehouse with accommodations for 15,000 sheets of eggs has been erected. The mulberry trees of Chosen are mostly of wild growth, and seedling nurseries have been created to supply improved trees.

Peculiar Agricultural Economics.

In a lecture upon agriculture in Chosen (Korea) the president of the model agricultural and industrial station at Suwon is reported to have said:

Chosen is a country which is peculiar in its agricultural economics. In other countries farmers living near a large city usually make it their business to supply its demands for vegetables and other agricultural products. For this reason lands and labor in suburban districts are dear. In Chosen, however, this is not the case. Lands and labor in the districts lying around a city—Seoul, for instance—are not dearer than those in other parts of the country. This is due to the fact that Korean farmers have been in the habit of raising all the necessities of life on their own lands. For instance, they will raise as much as they are likely to require of rice, barley, beans, cotton, hemp, tobacco, vegetables, etc., and will not cultivate more than they need. In this way commerce practically did not exist in Chosen in former times. One chief cause of this was the entire lack of goods roads, by which farmers could send their surplus products to other places in exchange for articles they wanted. Another cause is that in Chosen there are not many cities having a large population.

The lecturer estimated that the present area of arable land in Chosen might be increased 20 or 30 per cent, but not more; and gave it as his opinion that the needs of the growing population must be met by intensive rather than extensive farming and the introduction of improved seeds and implements.

FAR EASTERN NEWS.

[From London and China Telegraph.]

Dockyard expansion.—A proposal is made by the board of directors of the **Kawasaki Dockyard Co.**, Kobe, to increase the capital by \$5,000,000.

A fire insurance company (Toyo Kwasai Hoken Kwaisha) has been established in Tokyo with \$500,000 capital. **Kabayama Sukehide** is president.

Yarn-mill enlargement.—The **Japan Spinning Co.**, which has \$1,375,000 paid-up capital, contemplates an increase of some \$750,000 for installation of 20,000 more spindles.

Automobile factory.—Steps are being taken in Tokyo to form a \$1,000,000 company for manufacturing motor cars and bicycles. Over 70 leading business men of Tokyo and Nagoya are interested.

Tokyo's population, according to the latest official figures, is 1,907,272, an increase of 151,452 persons since the previous census. The number of males is 1,025,917, and females 881,355. The number of houses is 488,025.

Steel factory.—**Baron Shibusawa**, Messrs. **Kihachiro Okura**, **Motojiro Shiraishi**, and others are organizing the **Nippon Kokan Kaisha** (Japan Steel Tube Manufacturing Co.), capital, \$1,000,000, to manufacture steel ingots and steel tubes.

Japanese capital city improvements.—The Tokyo Municipal Alderman's Council has decided to raise another loan amounting to \$22,500,000 for expansion of the municipal electric business, improvement of streets, and the entrance to the Sumida River.

Railway survey.—The survey of the Royal Siamese Northern Railway is being commenced, with **Mr. Eisenhofer** in charge of the work. Additional engineers are being engaged from England. Tenders will shortly be invited for rails and small accessories.

Banking expansion.—It is announced that, in order to meet the ever-increasing requirements of clients, due to the general economic development of Japan, it has been decided to transform the **Sumitomo Bank** into a joint-stock company with limited liability, under the title of the **Sumitomo Ginko Kabushiki Kaisha** (Sumitomo Bank, Ltd.), with an authorized capital of \$7,500,000, of which one-half is paid up.

Manila gas plant.—With regard to the gas plant for Manila (award of contract being announced in Daily Consular and Trade Reports for Jan. 18, 1912), the promoters are expected to arrive in Manila in June, together with experts to put up the plant, etc., and immediately articles will be filed making a Philippine corporation of the present association of bankers, and a capital stock of about \$5,000,000 floated, part of which will be offered to the local investing public.

Tramway extensions.—The British consul at Osaka reports that the appropriations for the financial year 1912-13 for the Osaka municipal electric tramways permit the extension of the system about 6 miles, and to carry out this work it will be necessary to place abroad orders for \$2,000,000 worth of materials. Some of the principal items will be rails, electric motors, brakes, and other car stock (bodies are made in Japan), other machinery, insulated copper wire and insulating fabric, bridge-work material, etc.

Electrical enterprise.—The **Malacca Electric Lighting Co. (Ltd.)** has acquired a 30 years' license from the Municipal Commissioners to lay the necessary wires, cables, etc., through the streets of Malacca, Straits Settlements. **Riley, Hargreaves & Co.** have secured the contract and will at once proceed with the installation. The syndicate expects before the end of the year to supply electric energy for general lighting and fans, etc. **C. E. F. Sanderson**, of **Riley, Hargreaves & Co.**, is on the directorate, together with **Tan Chay Yan** and **Tan Jiak Hoe**. The capital, which has been subscribed locally, is nominally \$85,000, but the amount called up is \$56,700.

[From North China Daily Herald.]

China's first trial by jury was held in Shanghai on March 25, on the basis of a code of laws prepared by **Dr. Wu Ting Fang**.

A third labor exchange has been opened in Tokyo. The Japanese Home Office has attempted to persuade six big cities in Japan to establish such exchanges by offering a fair subsidy, but Tokyo alone has so far done so. Applicants to the Tokyo exchanges have been fairly educated as a rule, only few of them being uneducated laborers.

Gas profits.—The **Shanghai (China) Gas Co.** is paying a 13 per cent dividend for 1911 after writing off \$75,000 gold for depreciation and carrying forward about \$8,000. While municipal trading gives electric power at a very cheap rate, it has been also responsible for the gas supply being equally cheap. We have noted the increase in the consumption of electricity, and according to the report of the gas company there has also been an increase in the consumption of gas.

BRAZILIAN BUSINESS NOTES.

[Condensed from the Review, Rio de Janeiro; all sums being stated in United States currency.]

Freight rates from New York to Rio de Janeiro and Santos for cement shipments are stated to have been increased 61 cents from the beginning of April.

Electrical enterprise.—Decree 9440 authorizes the Ceara Tramway, Light & Power Co. (Ltd.), of England, capital \$1,000,000, to operate in the Republic.

Railway material.—The Minister of Public Works has authorized the South American Railway Construction Co. (Ltd.) to import \$487,000 worth of material for its line.

Colonization.—Decree 9384 authorizes the Amazon Land & Colonization Co., capital \$5,000,000, and domicile Portland, Me., U. S. A., to operate in Brazil. Dr. Carlos Sampaio holds the procuracion in Rio de Janeiro.

Ore mining.—Decree 9413 authorizes the Gongo Soco Syndicate (Ltd.), of England, capital \$37,500, to operate in the Republic. The concern plans to handle the iron-ore deposits at Gongo Soco in the State of Minas Geraes.

The internal-revenue tax on tobacco during 1911 totaled \$608,000, against \$540,000 during 1910. The tax on perfumery gave \$55,600, against \$52,000 in 1910. The tax on boots and shoes gave \$204,000, against \$184,000 in 1910.

Cotton entries at Pernambuco during January, 1912, amounted to 30,062 bales, against 41,804 bales for the same month last year. Exports from Pernambuco during January, 1912, were 1,926 tons, of which 1,460 went to the south and 466 abroad.

Police barracks.—In accordance with the proposal of Col. Silva Pessoa, commandant of the police brigade, the Minister of the Interior has made a contract with Engineer Leopoldo da Cunha Filho for completing work on the mounted police barracks for \$560,000.

Transportation enterprise.—The Empresa Brasileira Auto-Viacao, domicile Rio de Janeiro, has issued \$320,000 in debentures at 8 per cent. The company proposes to transport passengers and merchandise by motor cars and wagons, and establish an automobile repair shop therefor.

Gas profits.—The directors of the Sao Paulo Gas Co. (Ltd.) have decided, after transferring \$50,000 to reserve and setting aside \$25,000 for improving existing public lamps, to recommend a final dividend of 6 per cent free of tax, making 12 per cent for 1911 free of tax and to carry forward \$56,000.

Railway extension.—A contract has been made between the Sorocabana Railway and the government of the State of Sao Paulo for the construction of the company's extension from Salto Grande to the port of Tibirica. Government will supply the capital for the said construction on a basis of \$16,000 per kilometer (0.62 mile) plus \$440,000 for the purchase of rolling stock. In addition to this the company transfers to Government all its rights in the concession for the line from Sao Joao to Santos.

Electric company operations.—The report of the Para Electric Railways & Lighting Co. for the year ended November 30, 1911, states that the revenue was \$600,000 after providing for all expenses in Para. A final dividend of 5 per cent was paid in London, making 10 per cent for the year. A new 600-kilowatt generating unit has been installed in the power station, also a new condensing plant. The Sao Paulo Tramway, Light & Power Co. (Ltd.) has declared a quarterly dividend at the rate of 10 per cent per annum.

Diesel Engines for America.

The London Times states that on the recommendation of a commission of American engineers sent especially to Europe to visit the leading firms of Diesel-engine makers in England and on the Continent an English firm has made arrangements whereby the General Electric Co. will build Diesel engines to their design.

Rubber Exports from Malay Peninsula.

The export of plantation rubber from the Federated Malay States for the first three months of the present year reached 8,535,926 pounds, against 4,736,238 pounds for the corresponding period last year and 2,396,584 pounds in 1910.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 631. Concrete structures and bridges.**—Sealed proposals will be received at the offices of the United States Reclamation Service, Provo, Utah, until May 16, 1912, for the construction of concrete canal intake structures and concrete bridges on Indian Creek and Train Hollow Diversion Canal, located in Wasatch County, Utah, about 35 miles northeast of Thistle, Utah. The work involves the excavation of about 2,650 cubic yards of earth and rock and placing 560 cubic yards of concrete, 260 cubic yards of paving, a set of sluice gates, and miscellaneous steel. For particulars apply to the United States Reclamation Service, Provo, Utah, or Washington, D. C.
- No. 632. Laterals, water ditches, and structures.**—Sealed proposals will be received at the office of the United States Reclamation Service, Malta, Mont., until May 21, 1912, for constructing laterals, waste-water ditches, and structures on the first unit, Dodson South Canal, Milk River project, Mont. The work involves excavating approximately 67,000 cubic yards of material and the erection of six small structures. For particulars address the United States Reclamation Service, Washington, D. C., Helena, Mont., or Malta, Mont.
- No. 633. Water piping.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until May 25, 1912, for renewal of water piping in Barracks A, at the Naval Training Station, Newport, R. I. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named.
- No. 634. Cast-iron pipe and tunnel linings.**—Sealed proposals will be received at the office of the United States Reclamation Service, 605 Federal Building, Los Angeles, Cal., until May 16, 1912, for furnishing cast-iron pipe and tunnel linings for the North Platte project, Nebraska-Wyoming. For particulars address the United States Reclamation Service, Los Angeles, Cal., or Washington, D. C.
- No. 635. Earthwork and structures.**—Sealed proposals will be received at the office of the United States Reclamation Service, Malta, Mont., until May 21, 1912, for earthwork and structures on the first 11 miles of Dodson North Canal, laterals and waste-water ditches. The work involves approximately 277,000 cubic yards of excavation, 1,500 cubic yards of reinforced concrete, and the placing in structures of 86,000 feet b. m. of lumber. For particulars address the United States Reclamation Service, Washington, D. C., Helena, Mont., or Malta, Mont.
- No. 636. Concrete drop, chute, and abutments.**—Sealed proposals will be received at the office of the United States Reclamation Service at Provo, Utah, until May 16, 1912, for the construction of a reinforced concrete drop, chute, and abutments for two bridges on Indian Creek and Trail Hollow Diversion Canal, in Wasatch County, Utah. The work involves the excavation of about 4,500 cubic yards of earth and rock and the placing of 875 cubic yards of concrete and 225 square yards of paving. For particulars address the United States Reclamation Service, Provo, Utah, or Washington, D. C.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8719. Technical articles.**—An American consular officer in a Mediterranean country reports that a local business man desires to represent American manufacturers of technical articles and those especially adapted for shipping, including leather belting, steam trucks, locomobiles built for agricultural purposes, lubricating oils, hand and power saws, etc. He states that satisfactory references will be furnished. Correspondence may be in French or Italian.
- No. 8720. Electric heating and cooking appliances.**—A business firm in the United Kingdom writes an American consulate that there is a demand for electric heating and cooking appliances, and it desires to get in direct touch with manufacturers only. It is of vital importance that those sending offers should give full particulars as to prices, measurements, descriptions, etc.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

Washington, Saturday, May 4, 1912

No. 106

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NEW NATIONAL COMMERCIAL ORGANIZATION SUCCESSFULLY ESTABLISHED.

The National Commercial Conference of April 22 and 23 in Washington was attended by between 600 and 700 delegates, representing practically every commercial interest and every portion of the country. The spirit of the meeting was shown in the promptness and unanimity with which an agreement was reached in regard to a plan of organization. This plan follows broadly the preliminary suggestions which had already met the approval of the Department of Commerce and Labor, and its details are printed herewith. It is suggested that they receive the careful consideration of all commercial associations.

Organization of the National Chamber of Commerce.

ARTICLE I. *Name*.—The name of this association shall be the Chamber of Commerce of the United States of America.

ART. II. *Object*.—The object of this association shall be to provide a national clearing house for the development and consideration of business opinion and to secure united action upon questions affecting the commercial interests of the United States. Only questions of national importance shall be considered.

ART. III. *Membership*.—Every commercial or manufacturers' association not organized for private purposes shall be eligible for constituent membership in the chamber. Such associations shall be of two classes: (1) Local or State commercial or manufacturers' organizations, such as boards of trade or chambers of commerce whose activities are confined to a single State, city, or locality, and (2) State, interstate, or national, commercial or manufacturers' organizations whose membership is confined to one trade or class of trades.

ART. IV. *Representation*.—Associations having twenty-five members shall be entitled to one delegate and one vote, and for each one hundred additional members in excess of fifty, one additional delegate and one vote, but no association shall be entitled to more than ten delegates and ten votes.

ART. V. *Dues*.—Each association shall pay annually in advance dues of \$25 for each delegate to which it is entitled. Members from cities of less than 50,000 population may be admitted by vote of the board of directors upon the payment of such dues as the board of directors shall fix.

ART. VI. *Officers*.—There shall be an advisory council made up of one representative selected by each constituent member. There shall be elected by this conference a board of directors of 25 to serve until the next meeting, which board shall elect a president, three vice presidents, and a treasurer.

ART. VII. Duties of board of directors.—Sec. 1. It shall meet and organize immediately upon adjournment of this conference.

Sec. 2. It shall elect a secretary and prescribe his duties.

Sec. 3. It shall provide permanent headquarters in the city of Washington and the necessary clerical force for the transaction of the business of the association.

Sec. 4. It shall designate the place of meeting of each annual convention at least 90 days in advance thereof and make the necessary arrangements therefor.

Sec. 5. It may, by three-fourths vote of the total membership of the board of directors, call special conventions of the association, giving to all members notice in writing at least 60 days in advance thereof.

Sec. 6. It shall prepare a program of subjects to be discussed at each annual or special convention, copies of which program shall be mailed to each delegate at least 60 days in advance of such convention. Each member may from time to time submit to the board of directors such questions for discussion at the annual or special conventions as it may deem desirable. Suggestions when approved by the board of directors shall be placed upon the programs in the order in which they are received. The board of directors may include in the program such questions of national importance as it may deem desirable for consideration and action.

Sec. 7. During the interim between conventions the board of directors shall submit to the members of the chamber such questions of national importance as it may deem wise for consideration and action. Upon receipt of same it shall be the duty of the members to furnish, within 60 days, an expression of opinion upon same. Any member may also during such interim submit to the board of directors such subjects as it desires to have discussed by other members, which questions, if deemed to be of national importance, shall in turn be referred to the various members for discussion and report.

Sec. 8. It shall also publish from time to time reports indicating the results of the discussion of the various questions which shall have been submitted to the members and distribute such reports among the members at such intervals as it shall deem wise and necessary. It shall also transmit these reports to such public officers or bodies as the convention may order or the board of directors may deem proper.

Sec. 9. It shall be the judge of the qualifications of all applicants for membership, and no applicant shall be admitted to membership except by vote of said board of directors; nor shall any applicant be eligible for membership until it has presented to the board of directors a written statement setting forth, first, its purposes; second, its total membership; third, the date of its organization and such other information as the board of directors may require.

Sec. 10. It shall prepare such rules as may be necessary for the orderly conduct and procedure of the national and special conventions, which rules shall not conflict with the provisions of these articles of association.

Sec. 11. The rules herein set forth and such other standing or special rules as the board of directors may adopt affecting convention procedure may at any time be suspended by a three-fourths vote of all the delegates present at any convention.

Supplementary Resolutions.

Resolved, That the board of directors be instructed to formulate a constitution and by-laws for the Chamber of Commerce of the United States of America in general conformity with the outline plan of organization adopted by this conference and apply for Federal incorporation of the same.

Resolved, That as representatives of various organizations from widely separated points we hereby pledge our efforts to make the Chamber of Commerce of the United States of America a success and to recommend to the organizations we represent that they adopt the tentative plans suggested at the conference and thus become members of this organization.

A central office has been established in Washington, and the development of the work of the Chamber of Commerce of the United States of America begins at once.

Consular Trade Conferences.

Consul Abraham E. Smith, of Victoria, British Columbia, Canada, advises that he intended leaving his post on April 17, 1912, to spend 30 days' leave of absence in the United States. Communications in regard to conferences on trade matters concerning Consul Smith's district should be addressed to him in care of Mr. A. Philip Smith, city attorney, Rockford, Ill.

CONSTRUCTION WORK ABROAD.**ARGENTINA.**

[From Consul General R. M. Bartleman, Buenos Aires.]

Progress in Construction of Underground Tram Line.

Work has been progressing on the new underground line in Buenos Aires of the Anglo-Argentine Tramway Co. About 1,000 men are employed on the excavations. At four different points the tunneling is being done by a powerful excavator, especially constructed in Hamburg, which, with 150 horsepower, takes out 2 cubic meters of earth at one time and deposits it in electric trucks standing alongside. The excavator is mounted on a gyratory crane on rails which move in the direction of the work.

Between the terminal points there will be 11 stations, all on the same plan. The two platforms will be completely independent of each other, one for passengers entering, the other for passengers leaving.

The terminal stations will be larger and each will have three platforms. The trains will be worked on the block system, train B not being allowed to leave the station in which it is standing until train A has passed the next station and "line clear" signaled. The mean velocity of the trains will be 10 kilometers (6.2 miles) an hour. The cars are to be of the most up-to-date type and in the busy hours of the day the trams will start from the termini every minute. The 10-cent (\$0.0426 United States gold) fare will obtain throughout.

URUGUAY.

[From Consul Frederic W. Goding, Montevideo.]

Project for Deepening the Port.

Immediately after the passage of the Montevideo port superstructure act, last May, the Executive initiated a series of studies and surveys, in order to furnish the data necessary for further improvements to the port, as its capacity was found to be too limited to cope with the ever-increasing demands of its commerce. On the basis of such data a plan has been prepared, a portion being embodied in a project of law now before the Chambers.

The project provides for the deepening of the entrance channel and the two new dársenas (basins) to 40 feet, the other parts of the harbor to such depths as may be required, ranging from 16½ to 33 feet. Fortunately, wise foresight planned the existing wall for a depth of at least 33 feet.

The act of May, 1909, authorized the extension of the anteport to 300 meters (meter=3.28 feet) beyond its original 1,000 meters, which has been found to be insufficient, the requirements of the port demanding an increase in its area by 400 meters, or 60 per cent.

Reclamation of 425 acres is to be effected by utilizing the material brought up by the dredges, where shallows exist, one-half of which is to be sold. At \$5 per square yard, the sales would cover nearly the entire cost of the work.

The other features of the plan have not as yet been made public, but are nearly ready to be presented to the Chambers for consideration. As calls for tenders will be published in the course of time,

opportunities will be presented for American contractors to present bids for portions of this work, should they desire to do so.

[Other recent reports on the improvement of Uruguayan harbors appeared in Daily Consular and Trade Reports for Sept. 9, 1911, and Apr. 20, 1912.]

Increasing the Electric-Light Plants of Uruguay.

From reliable sources interesting details have been obtained bearing upon the improvements made and being planned in the electric-light service of Uruguay.

At the Montevideo plant a 6,000-horsepower turbine engine is being installed, which will greatly reenforce the present vast power that, in spite of abundant foresight, is insufficient to supply the daily increasing demand for more power and light. It will be ready for service May 1, 1912. A cable has been laid to Sayago for public and private supply, but more especially to provide the necessary power to the new cement works there with 500 horsepower, which is soon to be doubled.

Two stations are nearly ready for service at El Cerro, and plans have been submitted for installing the street lights. It has been decided that persons requesting light and power prior to March 31, 1912, will be exempt from line taxes, all others being required to pay a special tax per lamp and another for each horsepower of energy.

An engineer has been commissioned to visit the principal cities and towns of the Republic in order to draw plans for future stations. He has visited Punta del Este, Maldonado, San Carlos, and Pando, which, including those already existing, will reach a total of 32 Government-owned stations. On the completion of his labors, tenders will be called for the machinery, all to be of uniform type and installation.

Soon the cities and towns of Uruguay will be not only lighted with electricity, but also will be connected with an up-to-date telephone system, equal to any in existence, and all Government owned.

[For previous reports on plans for the extension of electric lighting in Uruguay, see Daily Consular and Trade Reports for Jan. 5, Jan. 22, and Feb. 8, 1912.]

PERU.

[From Consul George H. Pickersall, Para, Brasil.]

Sewerage System Proposed for Iquitos.

The President of the Commercial Association of Iquitos, Peru, has written to this consulate that the Peruvian Government has authorized the issue of a £200,000 (\$973,300) loan, the proceeds of which will be employed in providing the city of Iquitos with a new and modern system of sewerage. Iquitos is estimated to have about 7,000 population. It is situated at the head of the Amazon River navigation for large vessels, being some 2,100 miles from Para, Brazil. It occupies an important traffic position, being the base of supplies for an immense surrounding territory; the inhabitants of which depend upon outside sources for a large proportion of their supplies. With other Amazon River cities, Iquitos has suffered during the past year from the fall in the price of rubber, but it is the general belief that the experience will in the end have a good effect, of which this desire for improvement of the sanitary condition of the city is not the least important.

Mr. E. Strassburger, president of the Iquitos Association referred to, states that the loan is to be issued at 92, to be amortized at 8 per cent annually, while the customs duties will be rescinded on all material imported for the project. He adds that the association has contributed \$15,000 with which to make the preliminary studies for the improvement, and suggests that American firms interested in such enterprises write for more detailed information to the Minister of Finance and Public Works, Lima, Peru. Mr. Strassburger also sends the following data of the commerce of Iquitos for last year:

Rubber shipments, 2,081,887 kilos of 2.2 pounds each, compared with 2,362,197 kilos in 1910.

Duties collected on imported goods, \$1,225,540, compared with \$1,341,587 in 1910.

Shipping tonnage, 43,687 entered and 42,336 cleared; over 100 of the vessels entering were large steamers engaged in foreign trade.

[It may be added that the American consulate at Iquitos has been closed for several years, but is now being reopened, Consul Stuart J. Fuller, formerly at Gothenburg, Sweden, having just arrived at Iquitos for this purpose.—B. of M.]

CANADA.

[From Consul G. Willrich, Quebec.]

New Freight Sheds and Immigration Building.

Important improvements are made by the harbor commission by erecting a large new freight shed and temporary sheds for accommodation of immigrants during the coming season.

A substantial modern and roomy new immigration building will also be erected this year on the site of the present structure, which has been found inadequate and out of keeping with modern requirements. Parts of the old building have already been demolished, and the foundation work for the new one has begun. This work is being done by the McArthur Concrete Pile & Foundation Co., of New York, and is progressing rapidly under charge of a young American engineer. This company employs the new method of making foundations by sinking a hollow steel cylinder containing a ramming rod, which later on is withdrawn. The hole is then filled with cement, after which the outer cylinder is also withdrawn, leaving a round cement column, a far better foundation than piles of wood, even the most durable.

There probably will be much work of this kind in Canada at various places where firm and lasting foundation work will be required.

The new immigration building will be 800 feet long by 85 feet wide, two stories high, and of reenforced concrete construction, and it will cost \$350,000. C. E. Deacon & Co., of Montreal, Quebec, are the contractors.

New Railroad Terminals and Harbor Works.

There has been much uncertainty regarding the location of railroad terminals and elevators at this port, and from present indications it would seem that radical changes are contemplated in that respect. The sites selected by the former Federal Government, it is rumored, will be abandoned in favor of other locations, for some of the most important harbor improvements about to be undertaken in this harbor.

Parliament has voted \$1,000,000 for improvements, aside from the subsidy which will be paid to the company that will undertake to

build the dry dock (details for which appeared in Daily Consular and Trade Reports for Apr. 20 and May 2, 1912), but such amount will be but a small part of the total expenditures required for the contemplated improvements in the way of large grain elevators, new steamship piers, railroad slips, railway stations, and railway ferries, pending the completion of the new bridge. The cost of these various terminals is estimated to amount to about \$9,000,000.

A final decision regarding the location and the extent of these various undertakings, it is claimed, will be made by the end of April, after which it is hoped that more definite information can be furnished for the benefit of American contractors that may be interested in harbor construction work.

[From Consul Charles M. Freeman, Sydney, Nova Scotia.]

Schools, Business Blocks, and Dwellings.

The city of Sydney is to build two new schoolhouses. Estimated cost of each, with accommodations for 400 pupils, \$20,000. They are to be of pressed brick and cement, of two stories; architect, J. Spencer, of this city. Contracts have not been made. Parties having in view the furnishings should apply for information to the mayor of the city, A. D. Gunn, Esq., chairman of the school commissioners, or to Mr. A. W. Woodill, supervisor of schools.

D. J. Buckley is to build a \$15,000 business block, two stories, brick and cement, for stores and offices.

The following building permits have been issued by the city of Sydney:

For the new Unique Theater, to cost \$20,000, two stories of brick and cement; owner, George Wambolt; contractor, W. A. Moorehouse. Chairs, fixtures, and stage fittings will be needed. Theater first floor, offices second floor.

To B. Green for a two-story \$20,000 block of brick and concrete; builders, Sydney Paving & Construction Co. (Ltd.).

To M. Lubchansky for a 2-story \$15,000 brick and concrete structure; builders, Sydney Paving & Construction Co. (Ltd.).

To John Turnbull for a 2-story \$16,000 concrete structure; builders, Sydney Paving & Construction Co. (Ltd.).

The last three buildings are for mercantile establishments on ground floor, offices above.

Frame dwellings—Dan Gillimore, \$3,500; Sully McDonald, \$2,500; John McDonald, \$3,000; J. P. Martin, \$2,000; H. J. Dangall, \$2,600; brick dwelling, E. W. Johnston, \$6,000.

FRANCE.

[From Consul Carl Bailey Hurst, Lyon.]

Interior Restoration of the Grand Theater.

The large municipal Grand Theater of Lyon is about to undergo important repairs at a cost of about \$40,000. Built in the early part of last century and at the time of its construction a thoroughly up-to-date opera house, it is in need of certain interior alteration to meet modern requirements. Among the changes contemplated are widening the aisles, enlarging the cloakrooms, new parquet floorings, restoring paintings on stairways, corridors, and foyer, new decorations for the theater proper, and modern mechanical scene-shifting devices, repairs of seats and stalls, and remodeling of the players' dressing rooms. A complete new stage-lighting system will be added, for which \$16,000 has been set aside. There is some doubt as to what the best lighting arrangement may be, and a commission will

study the systems in representative French theaters in other cities. All communications in reference to the matter should be in French and addressed to the mayor of Lyon, writing Monsieur le Maire de Lyon, Rhone.

Proposed New Central Station.

The question of a central railroad station in Lyon has been discussed for a long time, and more recently, in view of increasing passenger and freight traffic, the matter is now being studied to find an early solution. Mention has been made of a credit of about \$12,000,000 being devoted to this construction. It has been proposed instead of building a new central station in another part of the town to rebuild the local Perrache station on its present site to accommodate a larger number of tracks, which would require a smaller expenditure. It remains reasonably certain that one or the other of these vast building projects, involving the expenditure of a number of millions of dollars, will be undertaken in the near future with the cooperation of the municipality. Correspondence should be in French and addressed to the director of the P. L. M. Railway at Lyon, as follows: Monsieur le Directeur de la Compagnie Paris, Lyon, Mediterranee, Lyon, Rhone.

MIXTURE OF BRITISH AND FOREIGN WINES.

[From the London Times.]

New regulations came into force in the United Kingdom on April 1, 1912, restricting the mixing of British and foreign wines. The object of the regulations, which are made under section 10 of the finance act, 1911, is to prevent the selling of British wines, on which no duty is paid, in the place of duty-paid foreign wines.

Manufacturers are prohibited by the new regulations from mixing any British wine with any foreign wine in a quantity exceeding the proportion of 15 gallons of foreign wine to 100 gallons of British wines, and from mixing any spirits with any British wine except for the sole purpose of fortifying the wine. Manufacturers will be compelled to register all sales of British wines and dealers are prohibited from selling wines which do not comply with the above regulations. The regulations also provide that a rectifier or compounder of spirits must not mix any British wine with any spirits either for the manufacture of British compounds or for any other purpose; that a dealer in or retailer of spirits must not mix any British wine with any spirits except for the sole purpose of coloring or fining the spirits; and that British wine manufactured in conformity with these regulations must not, by reason of the admixture therewith of foreign wine, be sent out or sold or exposed for sale otherwise than under the designation of a British wine.

It is understood that the Board of Customs and Excise will not during the first three months interfere with the sale of existing stocks of mixed wines, but the regulations as to mixing came into force on April 1.

The imports of wines and spirits into the United Kingdom last year were as follows:

Classification.	Gallons.	Value.	Classification.	Gallons.	Value.
Foreign spirits:			Wine—Continued.		
Brandy.....	1,452,245	\$3,901,538	In bottles, sparkling		
Rum (including imitation rum).....	4,839,043	1,162,548	Champagne.....	1,131,451	\$8,465,691
Genera.....	411,032	281,523	Saumur.....	109,936	358,355
Unenumerated, not sweetened, tested.....	617,808	200,958	Burgundy.....	13,376	52,625
Other sorts, tested.....	151,477	1,430,887	Hock.....	34,947	131,559
Wine:			Moselle.....	81,356	317,783
In casks.....	10,856,762	10,015,442	Other sorts.....	17,490	55,649
In bottles, still.....	355,506	854,002	Total.....	19,966,038	27,234,560

MINING AND QUARRYING MACHINERY.

[From Consul Augustus E. Ingram, Bradford, England.]

One of the important industries of this district is the engineering trade, and in the vicinity of Bradford there are a number of iron-works and firms engaged in the manufacture of machinery and machine tools. Some of these firms, such as the Low Moor Iron Works, the Bowling Iron Works, Thwaites Bros. (Ltd.), and several others, have a big business in steam engines or general colliery plant, deep well pumps, drilling machines, etc. It has recently been stated that the output has been steadily growing in volume during the past 12 months both for the home and foreign markets. It is therefore extremely probable that American manufacturers would find in the firms in this district very strong competitors. I note in the press the statement that impending legislation regarding the use of electricity in mines has somewhat held back the demand of the mining industries.

There are a number of quarries in and around this city; indeed, Bradford is built of stone and is the center of an important stone trade. The output is a coal-measure sandstone, principally a fine sandstone or freestone. Most of the beds lie near the surface and are of great thickness. The stone is quarried in the open, and is used mainly for building, flagging sidewalks, and street paving; the oblong blocks used for street paving being known as "setts" or "Yorkshire setts." Large quantities of thin flag rock are also used for fences throughout this district, as practically all dividing lines, even of agricultural land, are made with thin stone walls. It is said, however, that quarrying is a diminishing trade, owing to the competition of cement and to the fact that the stone is becoming more difficult of access.

Machinery for Polishing Stone.

Inquiry develops that the machinery in use for quarrying and preparing the stone is practically all of either local or, at any rate, British manufacture, and consists of power cranes, saws, saw frames, planing machines, and rubbing or polishing machines. Some 12 or 15 years ago an American company arranged with one of the quarry owners in this district to have a sawing plant fixed up for exhibition, with a view to introducing its machinery. A considerable sum was spent in connection with this demonstration, but I am informed that it failed to bring about any sales beyond that of the machinery so installed. It therefore seems very doubtful if any business can be obtained here, especially as most of the quarriers are in a small way of business and hence are not disposed or able to make any considerable outlay. One firm [whose name is obtainable from the Bureau of Manufactures] informed me, however, that it is interested in improved machinery for rubbing or polishing stone.

[From Vice Consul Frederic W. Cauldwell, Batum, Russia.]

Batum Not a Mining Center.

Inquiries concerning machinery for mines seldom reach this consulate. Batum is rather a port of shipment than a commercial city. Caucasia is more than five times the size of New York State, and the large cities of Tiflis and Baku are 14 to 36 hours distant from Batum by rail. In Batum there is no demand for mining and quarrying

machinery; at Tiflis and Baku there is undoubtedly a market, but the sale will be in the hands of small merchants.

I have given considerable attention to the matter of how American manufacturers of machinery could best market their product in the Caucasus, and am persuaded that dealings with the retailers in the interior cities would not be the most satisfactory way. Collections would be intricate, and all correspondence would have to be in the Russian language. The merchants are accustomed to three to nine months' credit. It is to be doubted whether under the most favorable conditions a satisfactory working agreement could be reached by correspondence. Because of these conditions I believe the best plan for the American manufacturer would be to establish connections with some of the larger wholesale machinery houses at Rostof on Don. It is a large and progressive city and the headquarters for machinery of all kinds for this part of the world. The wholesale houses are in touch with the local dealers throughout a wide territory. They are familiar with the business usages of other countries and have convenient banking facilities. Correspondence can be conducted with the Rostof firms in French or German; by many firms English would be understood.

One of the largest users of mining machinery in this part of the world is the Caucasus Copper Co., whose mines are located about 50 miles from Batum. The general manager of the company is an American formerly connected with the Anaconda works. His address is obtainable from the Bureau of Manufactures. The Caucasus Copper Co. is planning extensions and in the near future will be in need of considerable equipment. The company buys machinery direct from the United States or other countries.

[From Consul Thomas W. Voetter, La Guaira, Venezuela.]

Mine Development in Eastern Venezuela.

The greatest need for mining machinery in La Guaira consular district is in its eastern part. A Canadian company is about to develop iron mines in the Imataca Mountains; there are other mines in the same general region, at Callao and elsewhere.

Communication is rather poor between La Guaira and eastern Venezuela, as vessels of deep draft can not enter the Orinoco River. The customhouse for eastern Venezuela was formerly at Ciudad Bolivar, but an additional one has recently been established at Imataca, or rather at Nueva Angostura, which is the official name of the new port.

As there is a probability of some increase in mining and road construction in the future, it might be well for American machinery exporters to pay attention to this field.

[Lists of names accompanying several of the foregoing reports may be had from the Bureau of Manufactures.]

Postage stamps in rolls.—Consular Assistant Louis G. Dreyfus, jr., of Berlin, has prepared a description of the new machine used by the Imperial German Post Office to print stamps in rolls (for use in automatic "slot" selling devices), mention of which was made in Daily Consular and Trade Reports on May 18, 1911. Consular Assistant Dreyfus's report will be loaned, upon request, by the Bureau of Manufactures.

VALENCIA MELON INDUSTRY.

[From Consul Robert Frazer, jr., Valencia, Spain.]

The fame of the fine winter melons grown in the Valencia district, of which 12,000 to 15,000 tons are exported annually, has extended over the greater part of Europe. Small shipments have even been made in recent years to New York and Boston, but the total absence of cold-storage facilities in ships visiting this coast and the consequent large percentage of deterioration in transportation have generally rendered such experiments unprofitable.

Varieties of Melons.

Classified in the order of harvesting season of each variety, the following are the principal species of melons cultivated here:

Pudents are the earliest in season, but have little else to recommend them, as they are insipid and, as their name indicates (*pudrir*, to rot), decay quickly in handling and transportation.

Chincholats or escrits, so called from the fanciful resemblance of the lines on the surface of the skin to Arabic writing, are small in size and of spherical shape. They are shipped in small quantities to Great Britain, where they bring fair prices because of their early appearance on the market (from the end of May to the end of June), but their flavor is inferior, and trade in them is said to be precarious, as, if picked when too nearly ripe, they are very likely to decay in transportation.

Canarios, so named from their bright canary color, are a hardy variety, which form the basis of Valencia melon exports to northern Europe in July and August. They are oval in shape with tough rind and firm pulp, the layer of which, however, is not thick, as the seed cavity is disproportionately large. They withstand the sea voyage remarkably well, but are not distinguished by fine flavor.

Negros and bronceados (black and bronze colored), the genuine winter melons of this zone, are by far the best varieties and receive the greatest care in selection and cultivation. The former are of a dark unchanging green color, of an elongated oval or cylindrical shape, and unusually large, weighing 9 to 16 pounds. The bronceados are oval or slightly conical in shape, with thick pulp and small seed cavity. Both these varieties at their best are very fine, and probably nothing superior of their kind can be produced in any part of the world.

Methods of Planting.

The Valencia system of melon raising requires seed beds and transplanting. The seeds are planted in the beds in clusters of five or six on a layer of animal manure wrought into a thick paste by the addition of water, each cluster being deposited in slight depressions in the surface about 8 or 9 inches apart. The bed is then covered with a light sprinkling of dry pulverized manure, which is kept moist by occasional spraying with water. Transplanting takes place when the two lateral branches of the plant are thrown out and the tip of the central growth is just appearing. The more delicate plants are discarded and only the healthiest and most vigorous utilized.

In preparing the soil for transplanting, the desired porousness is attained by mixing with it the sea sand used as hog bedding, to which is added fertilizer in the proportion of 1 sack of ammonium sulphate, the favorite nitrogenous fertilizer in this region, to 10 sacks of the sand bedding. The rows are 6 to 7 feet apart, and the distance between each 2 plants is 30 to 36 inches. Irrigation, in the absence of rain, is given at 8-day intervals.

In the Alicante district, a little south of Valencia, seed is planted definitely in the open, in pits about a yard apart, in which organic manure has been mixed with the soil.

Seed Selection.

It is difficult to obtain selected melon seed true to variety on the open market in this country. Each farmer reserves his own seed by a very practical method of selection, as only the seeds of fruit distinguished at the family table by sweetness, flavor, and thickness of pulp are set apart for future planting or exchange with neighboring farmers. This process of selection continued through a succession of years appears to be remarkably successful, attaining such uniformity and high quality of product that it is not unusual to find a whole plantation without a single flavorless specimen in the crop. The smallness of Valencia farms, however, occasionally proves an obstacle in selecting and preserving the purity of varieties, as the proximity of inferior stock may easily nullify the care and labor of the most intelligent farmer in melon raising.

Winter melons are harvested in the early fall and are suspended in loops of esparto cordage from nails in the beams of roofs and lofts, where they keep with but little deterioration for six months or more.

Spanish Watermelons.

The watermelon of this district, and indeed of all Spain, appears to be a fixed species that has undergone little modification for centuries. The varying degrees of color and different percentages of sugar that distinguish the pulp of fruit grown in different localities in Spain appear to depend almost entirely on soil conditions rather than varieties, and the Valencia watermelon differs little from similar fruit grown in northern Africa. It does not attain very great size, but has a remarkably thin rind and highly colored meat and is of superior quality.

The principal pests from which melons of all kinds suffer here are mildew, scale, and snails. The scale, which is said to belong to the family of the rose scale, is the most difficult to combat successfully, especially when dull, foggy, warm weather conditions favor its rapid propagation. The dry parching winds that blow at irregular intervals during the summer from the semiarid interior of the country effectively arrest the progress of this scale and if continued two or three days will exterminate it altogether. Snails are dealt with in a practical and economical way by turning flocks of ducklings into the melon plantations affected.

NEW ATLANTIC LINES.

[From Consul G. Willrich, Quebec, Canada.]

The Compagnie Générale Transatlantique has determined to establish a monthly service between Quebec and Havre. In case the service demands it the sailings will be increased.

It is also learned that Bowring & Co., of New York City, will have a cruising service this summer between the ports of Quebec and New York. There will be five trips in the months of July, August, and September. This new line will compete for business with the Quebec Steamship Co., which has had a monopoly of this route for some years and has built up quite a prosperous tourist business.

Swiss imports of oxen last year numbered 51,592, having an average value of \$140. About this same number is imported annually.

INDIAN INDUSTRIAL ITEMS.

[From Consul General William H. Michael, Calcutta.]

Alluvial Gold—Lucerne Cultivation.

Gow & Co., of Calcutta, who have obtained from the Madras Government a lease for exploiting alluvial gold in some rivers in Malabar, have deputed two mining engineers to conduct operations in the Dilambur River.

David Fairweather, a Kegalla planter, has acquired 300 acres, of which 200 acres are opened and planted with lucerne and other fodder and stocked with cattle, pigs, goats, sheep, and poultry. This is the first stock farm of its kind in the northwestern Province of Ceylon and has been named Blinkbonnie (stock) farm.

Radio System—Decline of Art Work.

Steady progress has been made with the formation of wireless telegraph stations in India. In the financial year 1910-11, \$13,330 was spent in starting work at Calcutta, Allahabad, Delhi, and Jutogh (Simla). In 1911-12 this work was continued and a beginning also made at Bombay, Karachi, Nagpur, and Lahore, the expenditure being \$200,000. For 1912-13 the provision is only \$66,660. There will later be a heavy outlay on account of payments to the Marconi company. The equipment of each of the eight stations with the necessary apparatus has been provided for, and India should soon have an inland radio system, while stations at the ports of Calcutta, Bombay, and Karachi will be powerful enough to communicate with ships at sea at long distances.

A report by the Public Works Minister, Jammu and Kashmir State, on the arts and industries of Kashmir says:

The use of imported European wool threatens the extinction of what remains of the shawl industry, and it is impossible for it to regain its lost position. Dealing with the present day Kashmiris one notices how, with the arts and the trade which Kashmir had in olden days, the businesslike and commercial qualities of the people have also deteriorated. A shawl trade of \$1,000,000 could not have been carried on with foreign countries if the men were not industrious, honest, and businesslike.

Adulteration of Cutch.

A Rangoon correspondent writes:

It will be remembered that the chamber of commerce some time ago was much exercised over adulteration of cutch. The position was fully explained to the local government by the cutch exporters. The question of appointing a Government inspector was not raised, in view of the opposition of the Chinese dealers. The lieutenant governor sympathized with the chamber of commerce in its desire to check adulteration while the cutch was in process of manufacture in the forests. There is no provision of law by which adulterated cutch can be confiscated; and even if legislation be introduced, it is difficult to see, apart from the general objections which may be taken to such legislation, how it can be effectively enforced in view of the admitted difficulty of detecting adulteration and of the further difficulty that will arise in most cases of proving satisfactorily that the person in whose possession adulterated cutch is found is responsible for the adulteration. The only feasible solution of this problem is that exporters should take such measures as may be practicable to check the adulteration of manufactured cutch which reaches the market.

Fish Culture in India.

Previous reference has been made to the important work done by Sir Frederick Nicholson, who is in charge of the Government fish husbandry of Madras Presidency. A bulletin recently issued from the Madras Fisheries Bureau says that Mr. James Hornell, assistant to Sir Frederick, has been investigating the methods of fish farming at

Arcachon, France, and at Comacchie, Italy, and that he has brought back to India some valuable information on the subject.

The French fish farm is situated on the side of former salt pans and marshes, and consists of a series of large ponds separated from a general basin by a bund of height and strength sufficient to prevent flooding during high tides and storms. The fresh sea water, with its well-oxygenated properties and quantities of minute life necessary for the small creatures within the ponds, is let in through sluices at intervals and a proportionate amount of pond water is expelled.

On the Italian farm the same basic principles are followed, and in both the aim is to utilize the natural instincts of certain species of fish in such a manner as both to stock the inclosed ponds automatically with an ample supply of fry at one season of the year and at another to trap in quantity such fish as have attained maturity and which instinct leads to attempt to pass to the sea for spawning purposes.

Mr. Hornell is of opinion that similar methods of farming could be introduced almost everywhere in the Madras Presidency, but he fixes upon the Dugarazapattanam backwater as being particularly favorable for the site of a lagoon fish farm. He adds that the initiation of such an industry would come as a boon to a population living under conditions of marked poverty.

AEROPLANE ENTHUSIASM IN ITALY.

[From Consul General James A. Smith, Genoa: see also Daily Consular and Trade Reports for Apr. 23, 1912, on an "Italian Military Aeroplane Competition."]

A National Aero League has been formed in Italy, and the raising of funds by public subscription has been started to build a fleet of 100 aeroplanes for the Italian Government.

Although this movement has been on foot only since April 1, in less than one week \$120,000 was raised by public subscription, and the entire nation is donating funds for the purpose. A central committee composed of the mayors of Milan, Naples, Palermo, Florence, Turin, and Venice, and several senators and presidents of aero and touring clubs, has been formed, and is directing the progress of the league, with Rome as its center.

One newspaper of Milan donated \$10,000 for the acquisition of aeroplanes for military use and \$4,000 for the National Aero League. The city of Venice has promised to raise funds sufficient to build three aeroplanes; Genoa, Milan, Turin, Rome, Florence, Padova, Palermo, Bergamo, and other cities, have each agreed to donate one aeroplane each, and other cities, as well as aviating and touring clubs and newspapers, are following the example. Each community donating an airship has the privilege of naming it.

Popular sentiment has also spread to the Italians in Argentina, Brazil, and in the United States, who, it is said, will give liberal aid. Students of universities have promised an aeroplane to the league, as have the railway employees of Italy, and permission has been given by the Government to raise subscriptions in the schools.

The league has named \$4,000 as the amount necessary to build one aeroplane. The type of airship is to be decided by the Minister of War. The primary scope of the aeroplanes is to be military. This move is the greatest impulse aviation and airship construction have had in Italy.

AIR COMPRESSORS IN TRANSVAAL MINES.

[From Consul Edwin N. Gunsaulus, Johannesburg, South Africa.]

American firms wish to know the number of air compressors in South Africa. There were on June 30, 1910, in the mines of the Transvaal, according to the acting Government mining engineer, 257 compressors, with a total horsepower of 100,291, while only 400 horsepower of compressed air was purchased. The engineer further states that no separate returns of the value of air compressors were rendered to the mines department, but that the value can be readily assessed by any manufacturer from a knowledge of the horsepower. A copy of Table No. 27, showing power used, from the annual report of the Government mining engineer for the year ended June 30, 1910, is forwarded, from which American manufacturers can probably make their deductions. [The table in question will be loaned to those applying to the Bureau of Manufactures.]

I am informed that the gold mines in the Johannesburg consular district employ on an average three 50-drill compressors on each mine for the driving of drills. The latest statistics relative to the value of compressors shipped into the Transvaal are for the year 1910, but these are given under the head of "Steam engines for compressors, including compressors." The value of the total imports under this head for both gold and coal mines for the Transvaal for the period mentioned was \$543,402. As drills have been increasing in use the value of imports for 1911 is undoubtedly considerably greater than that shown for 1910.

Up to about two years ago the air compressors were almost entirely driven by steam, but since that date electric power has been furnished to nearly all of the mines, and steam power for air compressors has been superseded by electricity.

Electricity Superseding Steam—German Machinery.

The Victoria Falls and Transvaal Power Co. (Ltd.) head office, P. O. Box 2671, Johannesburg, has been supplying compressed air since June 1, 1911, from its power stations at Rosherville, Brakpan, and Germiston to all of the mines—about 30 in number—controlled by the Central Mining & Investment Corporation and Rand Mines (Ltd.), as well as to the Brakpan mine. While it is not known exactly to what extent the use of compressed air supplied by the Victoria Falls & Transvaal Power Co. has eliminated the employment of individual air compressors, it is known that four air compressor sets of 4,000 kilowatts each are being steam driven at Rosherville, and six sets of 4,000 kilowatts each are electrically driven at one of the other stations.

The big compressors used by the Victoria Falls & Transvaal Power Co. were imported from Germany (this company being a German organization with German capital). It was understood when this company was financed by the German bankers that all, or practically all, of the equipment necessary for operating the plant should be imported from Germany. A majority of the air compressors now used in the mines in this district are of British manufacture. There are also two or three makes of American compressors sold here. I am informed that after an air compressor is installed in the mine it is seldom changed for that of another make, as the question of spare parts which must be carried militates against change.

SAFFRON EXPORTS FROM SPAIN.

[From Consul Robert Fraser, Jr., Valencia; see also Daily Consular and Trade Reports for Oct. 15, 1910, and Oct. 24, 1911.]

While Valencia is probably the most important center of saffron production and trade in the world, the direct export business with the United States is comparatively unimportant, and its development is said by local shippers to be affected by the sales terms made necessary by American entry requirements under the provisions of the Pure Food and Drugs Act.

American importers naturally decline to contract or pay for saffron except on the guaranteed condition that the product will pass the Department of Agriculture's tests as to purity on arrival, and Valencia merchants in the saffron trade are, as a rule, small capitalists who are financially unable to accept the condition of deferred payment until the arrival and entry of shipments one or two months after date of export. I do not know of any local dealers who would be willing to grant 60 days' credit. The small amount of saffron shipped direct from Valencia to the United States is usually sold on firm orders from American importers, who open credits on London to be drawn against at sight with shipping documents attached to draft. The declared value of shipments of saffron invoiced at this consulate in 1911 was \$11,090, a decrease of \$3,212 from the declared value in the preceding year.

Spanish official statistics give the Kingdom's total exports of saffron for the last three years as: 1909—107,125 kilos; value, \$1,928,250; 1910—95,014 kilos; value, \$1,710,250; 1911—110,048 kilos, value \$1,871,020. (A kilo is equivalent to 2.2046 pounds.) What proportion of these shipments went to the United States does not appear from available data. American import records show that in the fiscal year 1910-11, \$88,215 worth of saffron, safflower, and extract, and saffron cake was entered for consumption, the countries of origin not being stated.

[A list of Spanish exporters of saffron may be had from the Bureau of Manufactures.]

ITALIAN-TUNISIAN TELEGRAPH LINES.

[From Consul John Q. Wood, Tripoli-in-Barbary, North Africa.]

An agreement has been reached between the Italian Government and the Eastern Telegraph Co. in regard to the vested interest held by said company, covered by its contract with the Turkish Government, for operating the cable between Tripoli and Malta. The Italian Government, in consequence, is commencing to lay a cable between Sicily (presumably Syracuse or Catania) and the port of Tripoli, to be followed by a cable between Sicily and Benghazi, and I am credibly informed that the Italian Government intends to connect Benghazi and Tripoli by a cable within several months.

[From Consul General James A. Smith, Genoa, Italy.]

The Italian Government has authorized the construction of a submarine cable between Sicily and Tripoli. The contract for this will be undertaken by Pirelli & Co., of Milan, large rubber manufacturers.

Direct wireless communication between Rome and Tripoli was to be open to service from April 15, 1912.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8721. Construction of public buildings.**—The American consulate general at Ottawa, Canada, reports that the Department of Public Works has advertised for tenders, to be received until May 13, 1912, for a public building to be erected at Wallaceburg, Ontario. Plans, specifications, and form of contract can be seen and forms of tender obtained at the office of Mr. H. J. Lamb, district engineer, London, Ontario, and at the Department of Public Works, Ottawa, Canada.
- No. 8722. Electric utensils.**—An American consular officer in a European country reports that an official in a local electric light company is about to open a store on one of the principal streets of the city in which he is located for the display and sale of all kinds of electric utensils and devices adapted for domestic use. Illustrated catalogues, prices, terms, and discounts are desired. Satisfactory references can be furnished. Correspondence should be in French or Italian.
- No. 8723. Household furniture.**—One of the prominent furniture dealers in the West Indies has requested an American consulate to procure for him catalogues of American household furniture. Good, strong, cheap, light-weight chairs, rocking chairs, sofas, etc., with seats and backs of cane or open wood are wanted. The tropical climate precludes the use of upholstered furniture. Catalogues in French with prices quoted in francs and dimensions in the metric system are preferred, but catalogues in English can be used, if necessary. Dimensions of goods packed ready for shipment should be given. The buyer should be given the benefit of any trade discounts, and prices f. o. b. New York or Mobile should be quoted.
- No. 8724. Italian marble and statuary.**—An American consul in Italy reports that a business man in his district desires to represent American importers of Italian marble and statuary. He has been a shipper of these products to European countries for 16 years, and it is said he stands well in the city in which he is located.
- No. 8725. Hospital equipment.**—An American consular officer reports that arrangements are being made to erect a new hospital in a city of his district. This will cost approximately \$80,000, and funds have been provided and the preliminary arrangements completed. It is the intention to build a modern hospital having a capacity of about 66 rooms and to be fitted with modern appliances throughout. The consular officer is informed that American manufacturers of this line of goods, by corresponding with an official named, will be given due consideration. American firms interested in this proposition should take up the matter as soon as possible.
- No. 8726. Fire hall and fire apparatus.**—A report from an American consular officer in Canada states that a municipality in his district is to build a new modern fire hall the coming summer, and manufacturers of appliances for this purpose should correspond with the city clerk. It is quite likely that in connection with the new fire station a further supply of hose, ladder trucks, etc., might be required.
- No. 8727. Material and machinery for making Portland cement.**—An American consul in a European country reports that a company in his district is about to build an up-to-date modern plant for the manufacture of Portland cement, and would like to receive, as soon as possible, from American firms, catalogues, plans, specifications, and any other particulars that will assist in starting this industry. The firm is especially anxious to communicate with concerns furnishing cement works with rotary furnaces heated by gas from generators. A previous notice of this character elicited responses from dealers and agents only, but the firm desires offers from manufacturers, and the members state that if interesting proposals are made they are prepared to visit the United States to make purchases. Correspondence should be in French.
- No. 8728. Iron tubing for gas, water, etc.**—A business firm informs an American consular officer that it desires to represent manufacturers of iron tubing for gas, water, and steam purposes. References can be furnished, and correspondence may be in English, French, or Italian.

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SALES ORGANIZATION FOR AUSTRALASIA.

[From Consul Henry D. Baker, Hobart, Tasmania.]

One of the most serious drawbacks to the sale of American goods in Australia, Tasmania, and New Zealand at present is the lack of suitable representation and proper advertising, selling, and distributing facilities. Exceptions to this condition are certain large American corporations which have been able, through effective local sales organizations, to reach influential positions and prestige in these countries. The greater part of the present export business of the United States with Australasia is carried on by companies of large capitalization, especially in such lines as kerosene, agricultural machinery, steel products, tobacco goods, cash registers, and sewing machines, for the sale of which powerful companies have established direct and efficient agencies and have steadily strengthened their position here.

Need of Direct Representation.

Possible purchasers of American goods in these countries prefer to deal with American companies directly represented here, which advertise locally and take part in the exhibitions which are so popular here, and whose representatives become well known to the community and probably members of clubs, chambers of commerce, and other commercial and social organizations. Moreover, more attention is given to new articles promoted by American companies with international reputations than to those introduced by companies of unknown reputation here, which perhaps hope to secure business merely by sending out letters and catalogues. Valuable orders occasionally result from such efforts, but much more can be accomplished by effective sales organization in the territory where business is sought. This applies especially to countries as remote from the United States as Australia, Tasmania, and New Zealand, with which correspondence is slow and tedious and to which the delivery of goods ordered by mail requires many months. Moreover, the people here are usually very conservative and somewhat prejudiced in favor of English goods, so that it is difficult to interest them in

American products made by firms not well known to them. The question of repairs or the renewal of broken or worn-out parts often proves a serious handicap to trade, unless the American manufacturer has representatives in this part of the world who employ competent workmen and keep needed parts in stock.

Many American firms are represented by indent agents doing business on commissions and frequently handling a large number of other lines, instead of by persons directly in their employ and giving them their entire time and attention. There is much complaint that many important American articles are offered by such agents at prices altogether too high when compared with the cost in America, and that an undue portion of these prices represents the excessive profits of the local agents. This feeling has become so general as to create a prejudice against many American articles. Occasionally persons try to obtain needed articles direct from the United States, but find that, owing to the agreements between the manufacturers and the agents, no article can be sold in an agent's territory without the agent receiving a commission, which must be added to the selling price.

Views of an Australian Consumer.

The following letter from the owner of about 400 square miles of land in the interior of New South Wales, who uses much of this area for sheep and dairy farming, indicates the handicap suffered by American goods from the excessive profits taken by agents:

The question of agents' profits affects not only the sale of American-made machinery, etc., in Australia, but also, as far as I can judge, all imported machinery. These excessive agents' charges cause the prices of the imported articles to be almost prohibitive. Take, for instance, one American motor car which is sold at \$924 in England and costs in Australia, I believe, \$1,216. I am informed that the existing system of payment by colonial agents to all manufacturers or exporters of goods imported into Australia is most objectionable, owing to the length of credit demanded by the agents, who are apparently paid cash by the purchasers of the goods but do not remit the money to the manufacturer or exporter until some 12 months after the sale, thus presumably living on the interest of the money received in payment of the goods sold on behalf of some outside manufacturer or exporter. I am only told this and do not know if it is true, but I think it should be looked into. If there were some depot in Sydney or Melbourne where American machinery, etc., could be stored, exhibited, sold, and distributed, the excessive profits of the colonial agents would be abolished, the payments for the goods would be made punctually, and the advantages gained by the manufacturers or exporters in the United States, as well as by the purchasers in Australia, would be very great. It would further be conducive to greatly increased sales when the purchasers would know that they were getting good value for their money and were not mulcted in heavy agents' commissions, etc.

I am told that there are many inventions in the United States which are suited to colonial conditions, but that, owing to agents' charges and other difficulties, they are not introduced into Australia and we are therefore the greater losers. Among other things, I believe there are some specially insulated cream carts and cans in the United States which are unheard of here and which if introduced into Australia and sold at anything like reasonable prices would revolutionize dairying in outlying places where distances are great, the climate semitropical, and roads too rough for motor traffic.

Cooperative American Sales Organization Would Aid Trade.

If different reputable and representative commercial organizations of the United States should ever find themselves in a position to effectively cooperate for the establishment of a sales organization in this territory, there seems but little doubt that a great number of American manufacturers who at present are either inadequately represented here or are not represented at all might be given an

opportunity of greatly increasing their sales and their prestige in this market. The manufacturers, including chiefly large corporations which are already directly represented here and doing a good business, could doubtless successfully continue their present plan of business without the necessity of any participation in the cooperative selling organization suggested. But smaller manufacturing companies which do not think it would pay them to have direct representation in this market might obtain a great advantage and be able to secure a much larger share of export trade at much fairer profits than is now possible. At present in numbers of instances the Australian local agent rather than the American manufacturer derives the largest benefit from efforts of manufacturers and of the Department of State and the Department of Commerce and Labor to work up American trade in these countries.

Short Time Allowed for Bids on Public Works—Exhibitions.

American consular officers often find it difficult to effectively assist American manufacturers who have no representatives in this country and who are not in easy communication with this market. In Australia and New Zealand more than 30 days' time is seldom allowed for answering advertisements for tenders for public works, so that by the time such trade opportunities could be communicated to the United States for publication for the benefit of manufacturers the time for receiving bids would have closed. By means of a cooperative agency every American manufacturer interested might have an opportunity to take prompt advantage of such openings as arise.

In Australia and New Zealand agricultural and industrial exhibitions are held with great frequency and are attended by large numbers of people. Such exhibitions furnish especially effective means of advertising and selling goods to residents of country districts. Through the medium of a local sales cooperative agency for American goods it might be possible to arrange for sections at these exhibitions to be exclusively devoted to the demonstration of many lines which may be now quite unknown here. It might even be found feasible to occasionally have exhibitions solely for American goods and possibly to arrange permanent commercial exhibitions in museums and perhaps floating exhibits on boats.

It would seem likely that any cooperative sales agency which had the support of representative trade organizations at home would furnish the means of giving to a great number of small but reputable American firms a much greater credit and standing in these markets than they could otherwise hope to possess.

Difficulty of Obtaining Indent Agents.

The foregoing remarks are made with no wish to disparage the excellent results which in some instances are now accomplished by local indent agents of American manufacturers, not to suggest that in all instances excessive and unfair profits are taken. Frequently the interest of American trade could not be better handled than they are now by such agents, and in such cases a "let-well-enough-alone" policy might prove the best. The suggestion of a cooperative sales agency is intended rather for those American manufacturers who may think it too expensive to be directly represented in this country and who can not find local agents with sufficient loyalty, zeal, and ability to represent them without exacting undue profits. Consular officers,

especially in the smaller centers of trade, on receiving letters from American manufacturers asking for lists of local firms which might act as agents for them, often find it difficult to make satisfactory reply, when they may know that every firm doing business in the line in which representation is desired is already acting as agent for foreign firms. In such instances American firms may not be able to secure any local business firm of standing to represent them, except perhaps by offering such superior inducements as to shake the loyalty of that firm to some American firm in the same line which it may already be representing. A cooperative sales agency would enable American manufacturers to sell goods here even if unable to find suitable local agents.

GOVERNMENT INSURANCE BANK.

[From American Minister Nicolay A. Grevstad, Montevideo, Uruguay; supplementing reports published Dec. 16, 1911, and Mar. 12, 1912.]

The State Insurance Bank opened its doors for business on March 1 under favorable auspices. Numerous applications for policies have been received, and the business is expected to increase rapidly as the policies of private insurance companies lapse. The bank has no official solicitors (*corredores*). One of the important problems the bank has to face is that of reinsurance, concerning which negotiations have been entered into with large companies with prospects of success.

The bank is now organizing its department for labor accident insurance. It has already received many applications and inquiries concerning this form of insurance from workmen as well as from large employers of labor. The purpose of the bank is to carry this class of insurance at cost or even at a limited sacrifice.

In an article commenting upon the start and public reception of the bank, *El Dia* says: "In spite of all that has been said, the State Insurance Bank has been excellently received in commercial circles generally. Even the insurance companies, from which some hostility might have been expected, have given evidences of good will."

COMBATING MINERS' DISEASES.

[From the forthcoming annual report of Director of United States Bureau of Mines.]

An arrangement has been made with the Public Health and Marine-Hospital Service by which one or more surgeons connected with that service will carry on jointly for that service and for the Bureau of Mines investigations looking to the improvement of mine conditions. These inquiries and investigations have already shown the prevalence of tuberculosis and hookworm as miners' diseases in a number of different localities in the United States. It is important that this work should be extended more rapidly, because of the fact that the health conditions, as well as the risk of accidents, may be influenced by conditions susceptible of easy improvement. Furthermore, the large and continuous influx of foreigners into the mining regions of the United States will bring to an increasing extent the hookworm and other diseases that abound in mines in parts of certain European countries.

Various questions that concern the health of workers in mines, quarries, and metallurgical plants can not be answered finally without investigations and inquiries that are national in scope. Among such questions are the most efficient methods of preventing the diseases peculiar to certain industries, the most effective sanitary precautions to be observed in and about coal mines and metal mines, and the relative healthfulness of occupations pertaining to mining and metallurgical industries. The investigations and inquiries that are essential to the gathering of reliable information on these questions can be undertaken by the Bureau of Mines, in connection with its collection of accident statistics, in a prompt and efficient manner and at minimum expense.

DRAFT HORSES IN EUROPE.**DENMARK.**

[From Consul General E. D. Winslow, Copenhagen.]

The draft horses in this Kingdom are put to work between the ages of 2 to 2½ years, but as a rule they begin in the country districts and are only used in the large cities when they are at least 5 years of age. There are in Denmark at present about 550,000 horses.

The majority of the draft horses belong to what is called the Jutland breed, and are foaled in Jutland, although there are many breeding establishments on other islands comprising the Kingdom. The Jutland breed has been and is being constantly crossed with breeds of other foreign lands, especially Belgium. There is also much crossing with the horses from the south and central parts of Sweden.

The length of the usefulness of the city horse may be said to be from four to five years as a "coacher," five years at an omnibus, six years at a street railway, and from six to nine years on trucking work.

The price at which horses sell is difficult to give. Sound coaches can be obtained for about \$170, but the same horse after a few years' work would probably sell for only \$100. A good "bus" horse will cost \$200, but after service will bring about \$75. A car horse represents an outlay of about \$190, and when resold after service will bring about \$75. Brewery horses, which are usually very heavy, cost about \$275 to \$300, but when sold after being worked out bring only \$50. This low price is explained by the fact that the agricultural sections do not want such heavy beasts and the majority of these animals are slaughtered. An ordinary working horse, fresh, young, and sound can be had for \$200; what he will bring when sold is problematical.

The mortality of horses is about 2 or 3 per cent in well-kept stables. Injuries received seem to be the main cause of mortality. Diseases brought on by a bad digestion or disarrangement of the bowels or colds also add to the causes of mortality. The death rate among the loosely kept animals is about 5 to 6 per cent.

The daily allowance of forage is approximately 16 pounds of oats, 5 pounds of corn, 2 pounds of molasses, 6 pounds of hay, and 3 pounds of straw. No bran of any consequence is fed. For bedding, straw and coarse hay are used as a rule, and no account is taken of what the animal may eat. The teams used by the city are bedded with peat dust. The value of a horse's droppings may be placed at about 25 cents per month.

GERMANY.

[From Consul General A. M. Thackara, Berlin.]

The city of Berlin proper has few horses in its service, and those which it has are employed principally in connection with the agricultural operations which are carried on at the several sewage-disposal farms which the city maintains outside its limits. The largest public employer of horses within the city is the fire department, which is a police and therefore a State, as distinguished from a municipal, institution. The fire department at present employs 130 horses, the number having been recently reduced from 156. Owing to the increasing use of motor vehicles, it is expected that within four or five years the department will have dispensed altogether with the use of horses. Of the horses now in service, the greater number are

Mecklenburg half-breeds. The remainder are Hanoverians and Prussians. The half-breeds are considered the most serviceable.

Purchases are made through a purchase commission which subjects the animals offered to a most thorough examination before selection. If accepted, the animals are kept on trial for four weeks at owner's risk. The average price paid for select horses, aged from 5 to 7 years, is 1,400 marks (\$333.20). Seven years is the maximum age limit.

The daily ration of each horse consists of 6 kilos (13.23 pounds) of oats, which is mixed with 2 kilos (4.4 pounds) of "hacksel," and fed at 6 a. m., 12 m., and 6 p. m. Hacksel is a chopped straw, and when mixed with the oats in the crib it is slightly moistened. Each horse is also given 2 kilos of hay each evening. Under especially hard work, rations are increased to demand. No difference in the feeding is made on Sundays.

Horses which are considered no longer fit for use in the fire department are sold at public auction, when still workable as draft horses. When totally unfit for service, they are sold for slaughter and human consumption. The loss by disease and accident amounts to from 3 to 5 horses annually. The most frequently occurring fatal diseases are colic and obstruction of the bowels.

Peat cakes are used for bedding. The manure from this yields a return of 25 pfennigs (5.9 cents) per horse per month. It is used for fertilizing pasture land only. Straw manure, which is used for field fertilization, would yield a return of 1 mark (23.8 cents) per horse per month.

Copies of the following three pertinent books may be secured from the Bureau of Manufactures: (1) Bericht über die Verwaltung der Feuerwehr; (2) Dienstanweisung; der Pferdepark; (3) Dienstanweisung; Stalldienst und Pferdepflege.

RUSSIA.

[From Consul Jacob E. Conner, St. Petersburg.]

The Feeding and Management of Municipal Work Horses.

On January 14, 1912, St. Petersburg owned 1,319 work horses. The cost per head averaged 215 rubles (\$110). They are of mixed breed, artillery type, and were purchased when between the ages of 4 and 8. Their daily feed is 15 pounds of hay and 23 pounds of oats. Straw is used for bedding and there is no fixed price for the manure. Old, worn-out horses are sold at auction. The diseases most feared are the colic and influenza. Last year the losses from all causes were 23, against 26 in 1910.

THE NETHERLANDS.

[From Consul General S. Listoe, Rotterdam.]

The municipality of Rotterdam owns no horses, the number required for various purposes being leased from private stables. The Rotterdam Tramway Co., which owns about 430 draft horses, has furnished the following information regarding the breed, feeding, etc., of its horses:

Daily rations vary from 7 kilos (15.4 pounds) to 10 kilos (22 pounds) of oats, according to the weight of the horse, and to that is added from 7 to 8 kilos of hay.

The heavier horses are of Belgian origin and the lighter of inland or "Gelderland" race. The prices paid for horses vary from \$200 to \$400, and the average age of a horse, when bought for service, is 4 to 6 years, while the average length of time in which a horse is fit for service is 8 years. There is no special disease prevalent among the horses in the Netherlands.

The rate of mortality in the stables of the Rotterdam Tramway Co. varies from 2 to 4 per cent. When horses become unfit for work they are sold, generally to the slaughterhouses, and bring \$32 to \$60. Straw or moss litter is used for bedding, and the manure is sold for \$1.20 per 1,000 kilos (2,204 pounds).

On account of the prevailing high prices of oats, experiments are now being made to substitute a mixture of moss litter and molasses for part of the oats ration, each horse to be fed $1\frac{1}{2}$ kilos of this mixture, thus saving about 1 kilo of oats.

STATISTICAL ABSTRACT OF THE UNITED STATES.

The 1911 issue of the Statistical Abstract of the United States has just been published by the Bureau of Statistics. It contains the usual statistical statements of Government activities and general information brought down to date, and shows a considerable growth in size and number of subjects covered as compared with last year, the number of pages in the present issue being 803, as against 488 a decade ago. This growth in the number of pages illustrates the enlargement of the scope of the abstract from year to year, which now includes in its statistical statements the following general subjects: Area, natural resources, and population of the United States; agriculture, forestry, and fisheries; manufacturing and mining industries and patents; occupations, labor, and wages; internal communication and transportation; merchant marine and shipping; foreign commerce; internal commerce; commerce of noncontiguous territories; consumption estimates; prices; money, banking, and insurance; commercial failures; wealth and public finance; civil service; statistical record of the progress of the United States; and commercial, financial, and monetary statistics of the principal countries of the world.

PRODUCTION OF OLIVES AND OLIVE OIL IN SPAIN.

[From Consul Edward J. Norton, Malaga.]

Reports received by the Spanish Agricultural Department give the total production of olives for the Kingdom at 17,398,964 metric quintals (3,835,816,500 pounds), and it is estimated that the total production of oil for 1912 will aggregate 2,066,655 metric quintals (455,584,900 pounds). This crop was produced on an area containing approximately 1,435,177 hectares (3,546,515 acres).

The eight Andalusian Provinces, with Seville and Cordova leading, produce nearly 61.39 per cent of the entire olive-oil output of Spain. The production of oil for 1912 in a number of important Provinces is given as follows: Malaga, 5,511,500 pounds; Jaen, 3,968,280 pounds; Lerida, 3,130,532 pounds; Valencia, 2,935,050 pounds; Tarragona, 2,380,968 pounds.

URUGUAYAN WOOL CLIP.

[From Consul Frederic W. Goding, Montevideo, Mar. 21.]

The wool clip of Uruguay is one of the largest items of public wealth and constitutes one of the country's most important industries; hence, fluctuations in prices of textiles in foreign markets are keenly felt here.

The present clip has been characterized by a serious trade paralysis, due to refusal by the sellers to accept prices offered by buyers who, through their knowledge of conditions, were not keenly interested. Various causes have combined to influence the present conditions, the chief being the strikes in foreign countries, as men out of employment must curtail expenses.

Another important factor is fashion as regards ladies' cloths. Formerly 10 to 12 yards of cloth were required for a dress, whereas now the narrow skirts contain not more than half that quantity. Previous fashions called for long cloaks, those now being worn scarcely extending below the waist. Another point to be recognized is the excess of fat which increases the weight of wool, thereby causing a reduction in the prices offered.

Price Variations.

Comparisons as to prices have been made covering the month of March for the years 1911 and 1912, which show an appreciable difference in favor of those for 1911, as follows: In the season of 1910-11, superfine wool brought \$4.10 to \$4.15 per 10 kilos (22.046 pounds), the present prices being \$3.60 to \$3.65; the better class, light and clean, brought \$3.90 to \$4, which now commands but \$3.45 to \$3.50, and good conditioned stock that sold at \$3.85 to \$3.90, as against \$3.45 to \$3.50 now.

For second-cut wools, long, clean, and in good condition, \$3.70 to \$3.80 were obtained, while this year the highest was \$3.30.

Second goods in 1910-11 were quoted at \$3.55 to \$3.60; fair, from \$3.40 to \$3.50; cheapest, \$3 to \$3.20. The same grades of wool at present bring prices ranging from \$3.15 to \$3.20, \$3.05 to \$3.10, and \$2.80 to \$2.90, respectively.

Loose, superior, long, clean, and light wools were sold at prices varying between \$3.60 and \$3.65; good, \$3.40 to \$3.50; fair, \$3.20 to \$3.30. The same classes of wools this year bring \$3.10 to \$3.15, \$3 to \$3.15, and \$2.80 to \$2.90.

In crossbred wools there has also been a depreciation. In 1910-11 fine, superior, light, and seed-free wools sold from \$4 to \$4.10; good, from \$3.90 to \$3.95; fairly good, from \$3.70 to \$3.80; with seed, from \$3.20 to \$3.50; from superior fat animals, \$3.20 to \$3.30; Lincolns, \$3 to \$3.10; wethers, \$2.30 to \$2.40; from lambs, clean and long, \$3.20 to \$3.30; from unborn lambs, \$1.90. In the present season the following prices were obtained: \$3.60 to \$3.65, \$3.50 to \$3.55, \$3.40 to \$3.45, \$3.10 to \$3.20, \$2.90 to \$3, \$2.10 to \$2.20, \$3 to \$3.10, \$2 to \$2.20, and from unborns \$1.70.

Production and Shipments.

As regards the wool production, while the exact figures for the season of 1911-12 are not at present known, it is certain that the clip will surpass that of the previous year. The following figures are a

more or less accurate estimate of the production of wool during the present season, as compared with the clip for the two previous seasons:

	Kilos.
Exported to date.....	15,750,000
En route for export.....	4,500,000
In markets for sale.....	26,750,000
In the interior.....	7,650,000
Exported from the littoral.....	6,750,000
On hand in the littoral.....	4,500,000
Total production, season 1911-12.....	65,900,000
Total production, season 1910-11.....	62,510,000
Total production, season 1909-10.....	51,700,000

The average clip throughout the Republic was 27 kilos (59½ pounds) for each 100 sheep. As the increase in production this year has been considerable, to a certain extent it has overcome some of the evil effects of lower prices, and, while a shrinkage in the profits was looked for, it has been less than anticipated.

MANUFACTURE OF ENAMELED WARE.

[From Consul General A. M. Thackara, Berlin, Germany.]

Enameled ware was produced for the first time in Germany during the thirties of the last century. Its production seems to have been started in Belgium during the opening years of the century. From there it was soon introduced into France, and later into this country. In the earlier years of its German manufacture the utensils were of a dead color, blue outside and white inside, or gray both inside and out. Utensils of the latter coloring were made by Jopy Frères, in Lafeschotte. Another variety of ware manufactured during this early period was white inside with the exterior varnished. This is still used in large quantities, especially in the case of cast-iron utensils.

[Census returns show that in 1909 there were 108 enameling and japanning factories in the United States with 2,125 wage earners who were paid \$922,000. The cost of materials is given as \$1,496,000 and the value of the product as \$3,316,000. The capital employed was \$2,880,000. The imports of enameled ware in the fiscal year 1907 amounted to \$952,980, and in the fiscal year 1911 to \$764,957. The rate of duty (40 per cent ad valorem) remained the same.—B. of M.]

Cotton Manufacturing in Japan.

The following figures from Cotton Facts show the progress made by the Japanese cotton mills in the last five years (1911 cotton consumption being estimated):

Year.	Spindles.	Cotton consumed.
		Bales.
1907.....	1,421,785	920,228
1908.....	1,650,480	844,814
1909.....	1,695,879	978,800
1910.....	2,004,988	1,067,183
1911.....	2,009,764	1,141,000

SILOXYD GLASS.

[From Consul General R. E. Mansfield, Zurich, Switzerland.]

An important achievement in modern scientific research is the discovery by a Zurich inventor of a method of producing suitable apparatus for the chemical industry from electrically melted quartz.

The product is an improvement on quartz gut, or quartz glass, and is especially suited to the manufacture of pipes, tubes, receptacles, flasks, muffles, and other articles used in the production of chemicals, required to withstand a very high temperature and at the same time the effect of concentrated acids. Most of the articles used for such purposes have, until recently, been made of platinum, for the reason that a quality of glass that would meet the requirements had not been produced.

Articles made by the new process from electrically fused quartz because of the low coefficient of expansion, can be subjected to extreme changes of temperature without damage. It is now possible to make articles of large dimensions of this glass, such as socket pipes, acid bottles, and other vessels that will hold as much as 25 gallons. This new material has been placed upon the market as "siloxyd" glass, and the process of manufacture has been patented in most of the European countries and in the United States.

Discovery and Special Qualities of Quartz Glass.

Quartz glass, which has long been recognized as an important material in the manufacture of various articles employed in the chemical industry, and for which "siloxyd" is now being substituted where a severe test of temperature is required, was first discovered in 1839 by Prof. Gaudin, who later produced from the same material some tubes and elastic threads which were exhibited at the Paris Exposition in 1878.

In 1889, Boys, who saw the possibilities of this remarkable substance, succeeded in making from quartz small tubes and other articles. Although there were many subsequent experiments, little progress was made in the development of the quartz-glass industry until 1900, when Hereaus and Achendstone succeeded in making clear rock-crystal objects of sufficient size for scientific and mechanical purposes.

The raw material from which the glass is produced is washed quartz sand containing 95 per cent silicic acid, which is melted in an electric furnace in which the temperature rises to 2,000° F. All the agencies known to the glass-working industry, including compressed air, steam, gases, etc., can be applied, and it is now possible to melt and to mold into almost any desired form as much as 50 pounds of quartz. A remarkable quality of the quartz produced by the thermoelectric process is its resistance to acids. Even boiling acid, with the possible exception of hydrofluoric or phosphoric, will not corrode it. Quartz has the advantage of a coefficient of expansion about one-seventeenth that of the best glass suitable for chemical utensils and apparatus.

Process of Manufacture—Uses.

The chief objection to pure quartz glass as a material for apparatus used in the chemical industry is that it becomes brittle at high temperature, passing from the amorphous to the crystalline state with a diminution of strength. Until the discovery of Dr. Wolf-Burckhardt,

authorities on the subject claimed that the addition of any other ingredient to the raw material would injuriously affect the quality of the melted quartz.

The new process consists in adding to the raw quartz solutions of oxides of zircon, titanium, and other metals difficult to fuse (or silicates of same to silicic acid), the resulting mixture giving on fusion a transparent glassy substance which fuses at a temperature of 1,750°. The advantages claimed for this material over ordinary quartz glass are that its strength is 30 to 50 per cent greater than "quartz gut," tested by bending, and 10 to 30 per cent more tested by pressure, and that it is less brittle, because the devitrification is only about half that of quartz glass. It is also more resistant to basic metallic oxides.

The superior advantages claimed for "siloxyd" glass give to this new material a wide range of usefulness, especially for apparatus used in the acid industry and for laboratory purposes where socket pipes, tee pipes for acid conduits, evaporating basins, concentrating dishes, cooling vessels, special boxes, conical pipes, condensation utensils, balls for acid towers, etc., are required.

Color and Finish—Factory in Operation.

The color of zircon glass varies from white to a pale yellow; that of titanium glass from pale to dark blue. They can be given a finish resembling mother-of-pearl or like dull silver. These finishes are natural, and therefore practically permanent, and will not change after a few years of service, as is the case with so many composite materials. In addition to the uses already mentioned, siloxyd glass can be utilized for jewel plates, knife and fork handles, umbrella handles, bonbon boxes, hatpin ornaments, cigar and cigarette holders, napkin rings, doorplates, paper weights, etc.

The inventor, Dr. Franz Wolf-Burckhardt, now has a plant for the production of siloxyd glass in successful operation at Seebach, near Zurich, and there has recently been on exhibition in this city fine specimens of the output of the factory which have attracted much attention.

LABELING OF CANDIED CITRON.

Government Food Inspection Decision 148.

The Board of Food and Drug Inspection has given consideration to the question of what is the correct use of the term "Candied citron," when applied to the preserved peel of fruits.

The evidence gathered by the board shows distinctly that the term "Candied citron" is generally recognized in the trade, and by the consumer, to be applicable only to the candied peel of fruit of the citron tree, *Citrus medica* L., variety *genuina* Engl., a citrus fruit similar to the lemon, but larger and possessing a thick rind of characteristic flavor.

The rind of the citrus melon, *Citrullus vulgaris* Schrad., is often used in a similar manner to true candied citron. The board is of the opinion that the candied rind of this variety of watermelon, when sold in interstate commerce, must not be designated as "Candied citron." It should be labeled "Candied citron melon," "Candied watermelon," or some similar designation.

It is also considered that such terms as "American citron," "Candied domestic citron," or the like, are not correct designations for the candied citron melon and when used will be deemed misbranding, except when applied to the American product of the citrus fruit "citron," described above.

Condensed milk was exported from Switzerland to the value of \$5,700,000 in 1909, \$6,000,000 in 1910, and \$7,500,000 in 1911.

NORWAY'S INCREASING USE OF COTTONSEED OIL.

[From Consul P. Emerson Taylor, Stavanger.]

The imports of cottonseed oil into the Stavanger consular district have been growing from year to year, largely due to the increasing use of this oil in the oleomargarine factories of the district.

While the 1911 statistics for the entire district and for the Kingdom are not yet available, the imports for the city of Stavanger last year show, in contrast to a loss of 56,933 pounds in olive oil, a gain of 500,905 pounds in "all other oils," most of which was cotton seed.

The following figures give the total direct importations of these two classes of oil for the entire Kingdom and for the Stavanger consular district in 1909 and 1910:

Imported into—	Olive oil.		Cottonseed and other oils.	
	1909	1910	1909	1910
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Kingdom of Sweden.....	2,476,980	3,478,112	11,163,944	10,798,128
Stavanger consular district.....	2,023,802	2,970,110	498,660	777,282

Used in Oleomargarine Factories—Prices and Sources.

While large quantities of peanut oil and bouillon are now consumed by the Stavanger sardine factories, the amount of cottonseed oil used is still small. Very much the larger portion of the above imports of cottonseed oil was taken by the oleomargarine factories of the district. Because of the high prices of butter, which sells at 35 cents per pound, probably 90 per cent of the population of this district employ oleomargarine both for cooking and for table use. It is this rather than the action of the canning factories in resuming the use of the cheaper oils in packing sardines that accounts for the increase in the importations of cottonseed oil. [An article relative to the Norwegian packers' action as to bouillon appeared in Daily Consular and Trade Reports on March 22, 1911.]

The cottonseed oil imported into this district from the United States is shipped chiefly via the Norwegian-Mexican Gulf Line. It is purchased direct from the American exporters by Stavanger firms and agencies and is sold c. i. f. Stavanger at \$7.32 to \$7.68 per 100 pounds.

Nearly all the cottonseed oil imported here is American, though considerable quantities are purchased from Great Britain, Germany, Netherlands, and Denmark. The following are the countries from which the "cottonseed and other oils" imported into Norway in 1910 were received: United States, 8,410,138 pounds; Germany, 936,640 pounds; Netherlands, 815,518 pounds; Denmark, 325,468 pounds; Great Britain, 177,890 pounds; Mexico, 48,114 pounds; France, 32,538 pounds; all others, 51,822 pounds.

Compulsory wireless installation.—Supplementing the report published in Daily Consular and Trade Reports on March 7, Consul Frederic W. Goding, of Montevideo, states that the date for the compulsory equipment with wireless-telegraph apparatus of all vessels landing passengers at Uruguayan ports has been advanced to June 15.

ITALIAN BUSINESS NOTES.

[From Consul General James A. Smith, Genoa.]

Locomotives—Wireless Stations.

The Italian State Railways have recently placed orders with Italian manufacturers for 209 locomotives. The prices paid are from \$0.145 to \$0.1545 per pound for the locomotive and a uniform price of \$0.0794 per pound for the tenders.

The Italian Government is about to commence the construction of another ultrapowerful wireless station at Brindisi to correspond with those of Corfu, Alexandria in Egypt, and Tobruk in Tripoli.

Traffic through the Simplon.

From the opening of the Simplon Tunnel the traffic between Italy and Switzerland by that route has steadily increased. Last year 410,030 passengers and over 130,000 tons of merchandise were carried. It is expected that the opening of the Lotschberg Tunnel in 1913 will give an added impulse to the Simplon traffic.

Agricultural Consulting Commission.

The Italian Government has instituted a Consulting Commission for the Agricultural Industry of the country, and its members have been named. This commission is to have as its scope "the study and suggestion of means more apt to intensify the production of the agricultural industry and the defense against frauds in the commerce of agricultural products." To this commission will also be given all the functions now vested in the Oenologic Consulting Commission for the wine industry and those vested in the commissions for egg culture and the olive-oil industry. The commission is composed of 16 members, 14 named by royal decree, to serve three years. The other two members are the Director General of Agriculture and of the Forests.

First International Technical Congress for Prevention of Accidents to Laborers.

There will be held in Milan from May 27 to 31 the first International Technical Congress for the prevention of accidents and injury to laborers and for industrial hygiene. This congress will be under the patronage of the King of Italy and will consider technical means and safety devices tending to protect the life and limb of the laborer, as well as the hygiene of the industry. Legal regulations, insurance, and medicines are not to be considered. Countries to be represented are: France, Germany, Holland, Switzerland, and the United States.

Artillery for the Italian Government.

It is reported in the French paper, the *Petit Provençal*, that the Italian Government has recently placed an order with the French company, the Société Chatillon-Commentry et Neuves-Maisons, for 93 batteries of 6 pieces each of rapid-fire artillery of 75 millimeters caliber. The cannons are the invention of a Col. Deport and were selected after exhaustive tests of other French and German makes. The order is stated to amount to \$1,600,000.

Dardanelles closed.—Under date of April 18 the Turkish Ambassador at Washington informed the Department of State of the closing of the Dardanelles to navigation.

SOAP FROM SOYA BEANS.

[From Consul Albert W. Pontius, Dalny, Manchuria.]

A good portion of the many thousand tons of Manchurian beans exported to Europe returns to the Far East in various forms of manufactures, such as soap (bean oil constituting an important ingredient), refined oil, soya biscuits, etc.

The merits and economy of bean oil as a substitute for coconut oil and tallow have been scientifically established. For this purpose, however, the crude bean oil, as produced by the crushing mills here, must undergo a refining process. This is still a technical experiment at the local central laboratory, which seeks to provide a process commercially feasible and available to those with small capital. The few soap factories in Dalny and elsewhere in Manchuria must now mix other fats, such as coconut oil, to the bean oil to secure the proper solidity.

About one and one-half years ago Lever and other large British soap makers became interested in Manchurian beans as a desirable material. It is understood that Lever will establish a soap factory at Kobe for utilizing Manchurian bean oil, notwithstanding that soda, another important soap ingredient, is not yet produced in Japan, the annual imports of which for all branches of industry reaches about \$1,000,000. There are good prospects, however, of soda being procurable in Kwantung Leased Territory, which has immense resources for salt making.

In South Manchuria laundry soap sales are largest from June to October. The Mukden market and the country northward are supplied by Shanghai, chiefly with German and Russian products. A factory at Vladivostok makes a laundry soap which withstands the intense cold of Manchurian winters, and could extend its sale as far south as Kungchuling. However, a Mukden factory (Niao Ho), with a daily capacity of 5,000 pieces of bar soap and 400 pieces of toilet soap, makes such low competitive prices that the imports of the Russian product are affected.

The three factories in Dalny are Bangyoku Yoko on Oyamadori (which hopes to double its \$6,500 sales of last year), Hatanaka Soap Factory in Noto-machi (which may be reorganized into a \$10,000 stock company), and a factory in Kaga-cho. Their combined annual output is about \$15,000, mostly of laundry soap, a small amount of toilet soap being made in winter. The local industry has a promising future, but it must wait for large expansion until the refining process for bean oil and the extraction of soda from Kwantung salt are brought to a commercially workable basis.

[American soap factories imported \$2,685,596 worth of bean oil last year.—B. of M.]

Handling the Canadian customer.—Consul Fred C. Slater, of Sarnia, Ontario, writes: "With the average Canadian customer who buys only occasionally in the United States, it is best to quote prices f. o. b. his home town, if possible. He may not be advised as to the duty and method of clearing at customs, and is apt to conclude that the matter is worse than it really is and decline to deal with a foreign firm."

KOREAN INDUSTRIAL AND TRADE NOTES.

[From the Yokohama Chamber of Commerce Journal, Japan.]

Discovery of Rich Gold Mine.

A Korean discovered a rich gold and copper mine, 600 acres, in Chilposan, Fyongsan district, Whanghaido, Korea, and obtained official permission to work the mine. Mining work is now being inaugurated.

Coal Mining in North Chosen.

A coal mining company named Kanko Tanko Kabushiki Kaisha has been organized by Japanese capitalists in Tokyo with a capital of \$150,000 to work a coal mine covering 560 acres at Kapyong, in Hamheung district, north Chosen; main office in Tokyo and a branch at Hamheung and detached offices at Wonsan, Chongjin, and Vladivostok. The company has also applied to the authorities for permission to work an adjoining mine covering 250 acres and another covering 1,200 acres.

New Railways in Chosen.

According to the original plan the construction of the Seoul-Wonsan line (136 miles in length) and the Honam line (174 miles), which was commenced in 1909, is to be completed by 1914. As a result, however, of the great efforts put forth by the railway authorities since last year the work is making remarkable progress. The section between Taichon and Kunsan on the latter line has just been opened, while the section between Yongsan and Chohwon (60 miles) on the former line will be opened by October next. The entire Seoul-Wonsan line is open, and the Honam line will be ready by the end of 1913.

Exports of Cattle in Chosen.

Korean cattle exported to Japan proper through Fusan has remarkably increased in number of late. The total number of animals exported to Japan proper through Fusan in 1903 was 278, 1,781 in 1904, 5,060 in 1905, 4,945 in 1906, 18,356 in 1907, 19,303 in 1908, 3,180 in 1909, 1,312 in 1910, and 2,224 in 1911. The increase in the number of exported cattle during 1905, 1906, 1907, and 1908 was due to the great demand for cattle after the Japan-Russia war. During 1909 and 1910 the exportation showed a great decrease on account of the cattle plague which prevailed in Chosen the preceding year. Chongjin, North Hamkyong-do, reports that the total number of Korean cattle exported through the port to Russian territory during last year was 12,160 head, valued at \$239,000, an increase of 2,488 head, valued at \$76,000, over 1910.

Projected Iron Foundry at Chinnampo.

Some wealthy Japanese living at Chinnampo plan to establish an iron foundry there. Iron ores now taken from iron mines in South and North Pyongan and Whanghae Provinces are all exported to Japan through Chinnampo. The three Provinces contain many rich mines, the most famous being at Chailiyong, Eunyu, Changyon, and Anak. Hitherto these mines have produced 11,000 tons of ores a year between them, but the work having been enlarged it is estimated that 150,000 tons will be taken in 1912. Whether the project for establishing a foundry at Chinnampo materializes or not, it is safe to predict that the iron mining business in Chosen will make remarkable progress in a few years.

Graded Wages for Brass Workers.

Consul Albert Halstead, of Birmingham, England, forwards a list of wages paid to various grades of brass workers and metal mechanics in that consular district, together with a document giving the rules governing the payment of sick and unemployment benefits to members of the National Society of Brass Workers and Metal Mechanics. Both will be loaned by the Bureau of Manufactures upon application. The system in vogue in these trades provides a novel means of grading workmen according to their capacity, and providing a certain wage for each grade. This system was described in Daily Consular and Trade Reports for November 12, 1910, and May 13, 1911.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8729. Hydraulic traveling cranes.**—An American consular officer in a European country reports that a company in his district will soon open a competition for the construction of 16 hydraulic traveling cranes. The company will consider only the plans and proposals submitted in its offices by the local representatives of the builders. The cranes should have a lifting capacity of 1½ metric tons, with adjustable range. American firms interested in this matter are advised to instruct at once, by cable, their representatives to get in touch with this concern. References and a list of similar machines constructed and installed by them during the past 10 years will be required, and should accompany the application to submit designs and prices.
- No. 8730. Dredging in Canada.**—The American consulate general at Ottawa, Canada, reports that the Department of Public Works has advertised for tenders, to be received until May 13, 1912, for dredging required at the following places in the Province of Ontario: South Lancaster, Gananoque, Kingsville, Blind River, Cobourg, Honey Harbor, Port Hope, Trenton, and Deseronto. Forms on which tenders must be made can be obtained from the Secretary of the Department of Public Works at Ottawa.
- No. 8731. Pitch for crossties and boilers for locomotives.**—The American consul at Valparaiso, Chile, reports that the director general of the Chilean Government railways has asked for bids for 105,670 gallons of pitch for crossties, and 22 boilers for locomotives. The former are to be opened in the office of the Director General de Ferrocarriles del Estado on June 1, 1912, and the latter at the same place on June 8, 1912.
- No. 8732. Cold-storage plant.**—The American representative of a foreign Government informs the Bureau of Manufactures that he desires to get in touch with firms able to put up a cold-storage plant and furnish equipment for the same. Fruit was mentioned as being one of the products to be handled.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 627. Construction of post offices.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring, and lighting fixtures) of the following buildings: (1) Until May 31 for post office at Charleroi, Pa. This building is to have two stories and basement of approximately 4,156 square feet ground area; stone faced, slate roof, and fireproof construction except the roof. (2) Until June 4, 1912, for post office at Santa Barbara, Cal. This will be a two-story and basement building of approximately 6,560 square feet ground area; stucco faced with stone and terra-cotta trimming. (3) Until June 5 for post office and courthouse at Muskogee, Okla. The building will be of fireproof construction, four stories in height, stone faced, and copper roof, with a ground area of approximately 20,400 square feet. Drawings and specifications for these buildings may be obtained from the custodians of the various sites or at the office of the Supervising Architect.
- No. 628. Panama Canal supplies.**—Sealed proposals, in triplicate, will be received at the office of the General Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., until May 22, 1912, for furnishing transformer room equipment for all Panama Canal locks. (Circular No. 705.)
- No. 629. Ordnance supplies.**—Sealed proposals, in triplicate, will be received at the Watervliet Arsenal, Watervliet, N. Y., until May 25, 1912, for furnishing steel, hardware, forage, fuel, oils, etc., during the year ending June 30, 1913. Information furnished on application to the commanding officer at the arsenal.
- No. 630. Hydraulic elevator plant.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until May 11, 1912, for a hydraulic elevator plant, etc., in the United States post office at St. Louis, Mo., in accordance with drawing and specification, copies of which may be obtained at the office of the Supervising Architect, or at the office of the superintendent, St. Louis, Mo.

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MANGANESE ORE IN THE CAUCASUS.

[From Vice Consul Frederic W. Cauldwell, Batum, Russia.]

The manganese deposits of the Caucasus are among the richest in the world. The principal mines are situated at Tchiatouri, in the Government of Kotais, about 190 versts (126 miles) from the Black Sea ports of Batum and Poti. The exploitation of the Tchiatouri mines began in 1878, but remained on a very limited scale until 1885, when the Trans-Caucasian Railway was constructed.

The ore is shipped to England, Germany, the United States, France, and Belgium, and in smaller quantities to other countries. England, Germany, and the United States are the best customers. The total export of the ore from Batum and Poti during the past four years has been as follows:

Perts.	1908	1909	1910	1911
	Tons.	Tons.	Tons.	Tons.
Poti	366,600	544,000	364,500	442,400
Batum	8,160	25,500	36,215	129,233
Total	374,760	569,500	400,715	571,693

The increase of the shipments from Batum during 1911 is attributed to the heavier cost of loading ore at Poti owing to the levying, in 1910, of a duty of one-half kopeck per pood (0.2575 cent per 36.112 pounds) on ore exported from that port. Manganese shippers at Batum loaded several steamers with full cargoes during the first two months of the current year and there is every reason to assume that the exports from Batum in 1912 will equal, if not surpass, those of 1911. About 15 or 20 per cent of the manganese exported is washed ore.

Declared Exports—Shipments to Other Countries.

Manganese ore declared for export to the United States through the consulate at Batum amounted in 1910 to 28,490 tons of a value of \$259,898. In 1911 the export amounted to 19,685 tons, with a declared value of \$197,737. These figures represent but a part of the ore from the Caucasus that was imported into the United States. Much of the ore sent to European countries is eventually trans-

shipped and finds its way to the United States. Three full shiploads are sent, on an average, each year direct from Batum and Poti to the United States in chartered vessels.

Until the beginning of 1911, no statistics were kept at the custom-houses of Batum and Poti that would show to what countries the shipments of manganese ore from these ports went. The statistics now available for 1911 give the following destinations of exports:

Exported to—	From Poti.	From Batum.	Exported to—	From Poti.	From Batum.
	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>
Austria.....	8,928	4,256	Spain.....	30,390	.....
Belgium.....	53,315	12,994	United States (by direct boat).....	5,450	10,694
France.....	29,925	15,885	Total.....	442,460	129,233
Germany.....	4,345	25,536			
Great Britain.....	105,943	31,869			
Netherlands.....	204,164	27,999			

The ore credited to the Netherlands is in reality destined for Germany. From Rotterdam the ore is sent up the Rhine to the iron districts of Germany.

Rich Ore—World Output.

The ore exported through the ports of Batum and Poti generally contains 48 to 52 per cent of manganese metal (Mn), while concentrates obtained from washing the granular ore and used for chemical purposes (glass making) are shipped containing 81 to 90 per cent of manganese dioxide (MnO₂).

The following table gives figures reproduced from statistical information relating to manganese shipments from all countries producing this metallic chemical element during the past three years:

Producing regions.	1909	1910	1911	Producing regions.	1909	1910	1911
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Caucasus.....	524,249	637,718	574,335	India.....	519,637	695,804	656,512
Donetz.....	41,490	22,592	13,888	Brazil.....	242,721	247,463	211,200
Algiers.....	900	.....	.....	Japan.....	170	.....	.....
Turkey.....	100	.....	620	Java.....	.....	992	98
Greece.....	3,000	.....	.....	Canada.....	26	.....	.....
Sweden.....	707	255	.....	Cape Colony.....	.....	850	.....
Spain.....	14,734	4,967	24,435	Total.....	1,350,495	1,615,927	1,485,746
North Wales.....	2,761	5,586	4,658				

These figures give the movement of ore from the mines at Tchiatouri to other parts of Russia as well as into stocks and to foreign countries.

Geologic Formation—Extent of Deposits.

The mines at Tchiatouri lie in a region of horizontal sedimentary formations, divided into two principal parts by the Kvirili River. These are again crossed by numerous branches of the river, and the whole region is thus divided into seven plateaus: On the right side of the Kvirili River—Rgani, Sedergani, Mguemevi, Darkveti; on the left side—Perevissi, Choucrouti, Itkhrvisi. The total area covered by these mines is about 126 square versts (about 55 square miles), of which 100 square versts (44 square miles) contain good ore.

The outcroppings of the ore are about 1,000 feet higher than the Kvirili River. The ore lies in a horizontal bed between limestone below and sandstone above. Besides solid benches, the ore also occurs in granules (oolitic form) mixed with sandstone. The richest

ore has been found in the plateaus of Mguemevi, Sedergani, and Choucrouiti; Rgani plateau yields rich wash ore.

According to calculations of Russian geologists the Tchiatouri mines contain about 1,070,000,000 tons of ore, estimated to be sufficient to supply Europe and the United States for at least half a century, especially as the Tchiatouri ore is of high quality. As already mentioned, the ore lies in horizontal layers, and consequently the mines can be worked easily and at the same time over great areas by means of tunnels (galleries) and by using picks and shovels.

Mining and Transportation Methods.

The mines are owned by a large number of Georgian peasants, who are without capital or knowledge of mining. Until recently, with few exceptions, the mines have been worked in a most primitive way, and as a result only about two-thirds of the ore has been recovered. Within the last six years various foreign firms bought up some of the larger plots and have started mining by more modern methods. The lump ore is separated by hand from the sandstone; only the ore occurring in granules is separated by water concentration in washing plants. In washing, the granular ore can be concentrated up to 60 per cent of metal or 90 per cent of peroxide of manganese (MnO_2), but these percentages are above the averages for the district.

The ore is transported to the railroad at Tchiatouri in two-wheeled oxcarts or by pack horses, and over bad roads, for distances varying from 2 to 5 versts (1.324 to 3.31 miles), at a cost of 2 to 3 kopecks per pood (1.03 to 1.545 cents per 36.112 pounds). The position of the mines is favorable for mechanical transportation of ore, especially by wire ropeways, but on account of lack of capital such methods have begun to be employed only lately and by a few firms.

From Tchiatouri the ore is carried on the Tchiatouri Railway, a 25-mile narrow-gauge branch of the main line, to Sharopan. At Sharopan it is transferred into the cars of the Trans-Caucasian Railway and shipped to either Batum or Poti.

Freight Rates—Foreign Capital—Storage Platforms.

The freight rate from Tchiatouri to these ports is 70.23 rubles (\$36.17) per car of 750 poods (about 12.1 long tons) of ore, which is 9.37 kopecks per pood (4.826 cents per 36.112 pounds). This rate includes all expenses of transshipment at Sharopan and three-fourths kopeck to the Manganese Producers' Association. The greater part of this freight rate is for the distance from Tchiatouri to Sharopan, viz, 5½ kopecks (2.8325 cents) for a distance of 38 versts (25 miles). The remainder of the freight rate, amounting to 3.87 kopecks, is paid for the distance of 162 versts (107 miles) from Sharopan to Batum or Poti. The best business in manganese would therefore seem to be done by the Tchiatouri branch of the State railway. The cost of building this short line was 1,500,000 rubles (\$772,500).

As most of the mine owners are Georgian peasants with little capital, the trade in the ore has been principally in the hands of commissionaires working with the assistance of banks, which charge 8 to 9 per cent interest. Of late considerable German capital has been invested in the mines and much of the unworked land is now in the hands of foreign capitalists.

A very important part of the manganese business for the exporter is to have at his disposal a number of well-situated platforms at

Tchiatouri, connected with a siding of the railroad, where stock for shipment can be stored. The Tchiatouri Railroad can furnish 400 cars per day at the utmost, and these are divided among the proprietors of platforms at a ratio of 1 car for every 20,000 poods of ore kept in stock. Therefore, the greater the quantity of ore in stock the larger is the number of cars allotted the shipper. At times of heavy shipments from Tchiatouri these rules are strictly followed by the railroad, while in slack times owners of small stocks can obtain as many cars as are free.

Advantages of Heavy Stocks—Loading.

The advantage of keeping heavy stocks and having good platforms at Tchiatouri are: (1) The owner of these stocks can always obtain a correspondingly large number of cars. (2) When he is expecting to load a steamer at Batum or Poti it is not necessary to accumulate beforehand a large stock of ore on the docks at these ports, but he can hold his shipments at Tchiatouri and forward in time to load directly on board ship from constantly arriving cars. The shipper can thus reduce expense of interest on the railway freight; and the ore being handled but once at the docks, loading on board ship is cheaper. It needs but a glance, therefore, to see that next to the possession of mines the control at Tchiatouri of suitable platforms of great capacity is one of the most important questions with which the trade has to deal.

The ore is put aboard steamers at Batum and Poti by laborers, who carry it in small baskets holding about 4 poods (144 pounds) over wooden runways erected from the dock to the steamer. In this way, and with a sufficient number of laborers, 400 to 800 tons of ore are loaded per day. If the ore is handled direct from arriving railroad cars, the cost of loading into the hold of the steamer is $\frac{1}{2}$ kopeck (about $\frac{1}{2}$ cent) per pood; but if the ore is loaded from the docks, onto which it has previously been discharged from railroad cars, the cost is $\frac{3}{4}$ kopeck. About six years ago there was constructed at Poti an elaborate elevator for loading the ore on board ship mechanically, but up to the present time this elevator has not come into general use. To pay for this improvement a charge of $\frac{1}{2}$ kopeck per pood has been recently placed by Poti on all ore going from that port. The result has been to divert shipments to Batum.

Manganese Producers' Association.

The Manganese Producers' Association, of which mention has been made, levies a tax of $\frac{3}{4}$ kopeck per pood on all ore sent by rail from Tchiatouri. It is given the right by the Government to levy up to 2 kopecks per pood. The income derived from this tax is set apart for bettering conditions about the mines.

The managing council of the association is elected at an annual meeting of manganese producers and exporters, at which apparently the voting regulations are such as to give the small dealers an overwhelming majority. As capital becomes more and more necessary to carry on deeper mining, the tendency is for the small producers to disappear, but they are still sufficiently numerous to be able to elect a council in sympathy with their views, and are urging the council to expend the proceeds of the tax to assist them to compete with the larger capitalists.

They point out that some of the larger capitalists, having installed mechanical transportation of ore from the mines to the railway platforms, have an advantage over those who are still obliged to use bullock carts. The small producers are urging the council to expend 1,000,000 rubles (\$515,000) for mechanical means of transport which shall be at the disposal of all producers. The council has also under consideration plans for the supply of water to the mines, for housing workingmen, and other improvements which are to be carried on from the funds procured from the tax.

Altering the present branch line between Sharopan and Tchiatouri to a broad gauge has been under recent consideration by the State railway engineers. Such improvement would eliminate the necessity for transshipping the ore from the trucks of the narrow-gauge line to the trucks of the main line at Sharopan. Exporters are urging a reduction of the railway rates that will bring the rate on the Tchiatouri branch line down to something like the normal rate for such service.

Stream Pollution by Washing Plants.

A feature of the manganese industry during 1911 was the marked increase in the quantity of ore washed at and about the mines, to the great discomfort of the population using the waters of the Kvirili River for domestic purposes. Most of the washing installations have been erected on the banks of the Kvirili or its tributaries, and the refuse from these plants has polluted its waters to such an extent that complaint was made to the viceroy.

The Manganese Producers' Association has devised a plan which seems likely to meet the exigencies of the case. It is proposed to construct a large basin in the valley of the Kvirili River below Tchiatouri at which slimes from the washing installations will be arrested. The water would there be purified and the overflow from the dam would be utilized for generating the electric current required for lighting the village of Tchiatouri, for electrifying the Sharopan-Tchiatouri branch railway, and for converting manganese waste sediment into ferromanganese in electric furnaces.

It is estimated that the washing installations now in course of construction when completed will have a daily capacity of about 2,613 tons of ore averaging approximately 53 per cent metallic manganese in the dry state; 1,460 tons of refuse, containing 30 per cent mineral to waste in washing the first-named quantity of ore.

[A list of the principal exporters of manganese ore at Batum and Poti may be secured from the Bureau of Manufactures.]

Improved Labor Conditions in Danish Shoe Factories.

Consul General E. D. Winslow, Copenhagen, reports that the shoe manufacturers of Denmark have closed an agreement with their workmen, the most important item of which is the change in working hours. A day's work in summer will be 9½ hours and in winter 9 hours, a reduction of one-half hour per day for the whole year as compared with former regulations. Another important item is the fixing of a minimum wage, which is set at 10½ cents per hour, with the promise of an increase to 10¾ cents after April 14, 1914.

AMERICAN MANGANESE INDUSTRY.

[Compiled from publications of the United States Geological Survey.]

Manganese is obtained commercially from manganese ores, manganiferous iron and silver ores, and manganiferous residuum from zinc roasting.

Manganese ores are found in many parts of the United States, but at only a few places do they occur in sufficient quantity to be of high commercial value. They have been mined in the New England, Appalachian, and Piedmont regions in the eastern United States, in northern Arkansas, and to a small extent in central-western California.

According to reports received by the United States Geological Survey, the manganese-ore industry showed slightly greater activity in 1910 than in 1909. In 1910 the quantity marketed amounted to 2,258 long tons, valued at \$22,892, the price per ton averaging \$10.14, as compared with 1,544 long tons, valued at \$19,675, an average price of \$12.74, in 1909. In addition to the quantity shipped, a small tonnage was mined and remained in stock at the mines at the end of the year.

Imports and Uses.

The importations of manganese ore greatly exceed the quantities mined in this country—a condition likely to continue so long as the principal sources of foreign supply are large and cheaply worked and ocean freights are low. There was a decrease in both the quantity and the value of the American imports of manganese oxide and ore in the fiscal year 1911, when compared with 1910, but an increase over those of 1909, as is shown by the following table, the quantities being long tons:

Countries.	1909		1910		1911	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
Belgium.....	933	\$16,887	795	\$9,937	1,494	\$16,965
France.....	9,033	113,358	4,528	58,899	3,398	44,648
Germany.....	2,077	48,198	4,376	80,765	4,919	83,809
Netherlands.....	521	6,052	815	8,000	169	2,927
Russia, European.....	1,093	15,818	50	805	710	10,392
United Kingdom.....	2,805	61,601	2,359	42,138	935	18,629
Canada.....	493	6,353	353	4,758	31	695
Cuba.....	3,019	12,689	2	26		
Brazil.....	24,050	210,148	45,650	446,309	57,700	534,263
British India.....	117,533	695,645	138,825	662,117	130,745	643,907
Japan.....	2,373	36,959	1,380	20,679	7	97
Russia, Asiatic.....	1,121	19,693	37,904	257,640	9,091	96,695
All other.....	10	256			2	150
Total.....	165,061	1,243,657	237,037	1,592,073	209,211	1,453,177

The principal use of manganese ores is in the manufacture of iron-manganese alloys, such as spiegeleisen, ferromanganese, silverspiegel, and silicomanganese. The first two of these contain principally iron and manganese; the last two contain considerable silicon in addition. Ferromanganese and spiegeleisen are used in steel manufacture as reducers of iron oxide during the final melting, as recarburizers, and in the manufacture of special steels alone or in combination with chromium, nickel, tungsten, and other steel-hardening metals. Manganese is also used in the formation of alloys with copper, aluminum, zinc, tin, and other metals. Manganese ores or manganiferous iron ores are used to a slight extent as fluxes in the reduction of silver, lead, and copper ores. Manganese peroxide is used as an oxidizer in the manufacture of chlorine, bromine, and oxygen, and of potassium ferromanganate; as a drier in paints and varnishes; as a decolorizer of glass; and in the manufacture of dry and Leclanché cells. As a coloring material manganese is used in coloring glass, bricks, and pottery. Several manganese salts are used in dyeing cloth and as paints.

Prices—World Production.

The prices of manganese ores used in the steel industry vary from \$5 to \$15 per long ton, according to the grade of the ore. The manganese ores for oxidizing and coloring purposes are valued according to the quantity of manganese peroxide present. Their consistency, etc., and prices range up to \$35 per ton for the better grades of ore. Manganiferous ores used in iron and steel manufacture and for fluxing range in price from \$2 per ton upward.

The following table gives the latest available statistics with regard to American and foreign production of manganese ore. The unit is the metric ton (2,204.6 pounds) for

all countries except the United States, whose production is given in long tons (2,240 pounds):

Countries.	Year.	Tons.	Countries.	Year.	Tons.
United States.....	1910	2,258	United Kingdom.....	1909	2,768
Brazil (exports).....	1903	163,506	Russia.....	1907	987,724
Chile.....	1908	1	Spain.....	1908	16,678
Austria.....	1909	17,717	Sweden.....	1908	4,594
Belgium.....	1909	6,171	Turkey.....	1908	14,123
Bosnia and Herzegovina.....	1908	6,791	Norway.....	1904	22
Hungary.....	1908	10,410	India.....	1908	674,315
France.....	1909	9,252	Japan.....	1908	10,955
German Empire.....	1909	75,787	Java.....	1908	1,181
Greece.....	1908	10,581	Queensland.....	1908	1,381
Italy.....	1909	4,626			

¹ Year ending March, 1908.

Deposits in North and South America.

Considerable quantities of manganese ore have been mined in New Brunswick and Nova Scotia and small amounts in Quebec and Ontario. In Newfoundland manganese carbonate of brownish color occurs. There are manganese deposits of importance in the Province of Santiago de Cuba, where the ore is chiefly pyrolusite, but other oxides of manganese occur. A bed of manganese ore of superior quality is reported from the island of St. Martin in the West Indies and another deposit has recently been discovered in Haiti.

Manganese ore has not been mined to any extent in Mexico. Few, if any, of the iron-ore deposits have associated manganese, though veins containing pure manganese ore are found at various localities. The Nombre de Dios manganese-bearing region of Panama covers an area of nearly 300 square miles along the Caribbean Sea. The ores occur as oxides, principally psilomelane, but also pyrolusite and braunite. The first shipments from the region were made in 1871.

Manganese ores are widely distributed in Brazil; large deposits occur in the State of Minas Geraes and smaller ones in the State of Bahia. Ores are also reported from the States of Matto Grosso, Parana, and Santa Catharina, and from the region of the Amazon River. In Chile, the manganese deposits are all on the west slope of the Andes Mountains, in the Provinces of Santiago, Coquimbo, and Atacama.

European Fields.

Manganese occurs in Spain in the following associations and localities: (1) As carbonate and silicate in the Province of Huelva; (2) as oxide in the Provinces of Oviedo, Teruel, and Ciudad Real; and (3) in manganiferous iron ore in the Province of Murcia. There are 8 or 10 large mines in the district of Beja, Province of Alemtejo, Portugal, of which some produce manganese carbonate, yielding 34 to 50 per cent manganese, and others produce oxides. The principal manganese mines of France are in the Departments of Saone-et-Loire and Ariège. The Saone-et-Loire mines ship binoxide and the mines of Las Cabesses in Ariège ship calcined and assorted carbonates. Smaller deposits occur in the Department of Indre, Aude, and Allier, Hautes-Pyrenees, and Lozere.

Belgium does not produce manganese ores proper, but a considerable amount of manganiferous iron ores. The center of production for these is the Province of Liege. They are also found elsewhere in Belgium associated with hematite. The chief occurrence of manganese in Germany is along the Rhine in the districts of Wiesbaden and Koblenz, in Hesse-Nassau. Smaller deposits are found in the Harz Mountains, in Saxony, in the Bonn district, and in Coburg-Gotha, in Thuringia. Manganese ores of three types occur in Sweden: (1) Pyrolusite with manganite, (2) hausmannite with braunite, and (3) carbonate and silicate of manganese accompanying iron ores.

No pure manganese ores are mined in Great Britain, but small amounts of manganiferous iron ore are produced. The localities where most of the ore has been mined are Barmouth and Harleck, in Merionethshire, North Wales; Carnarvonshire, North Wales; Tavistock in Devonshire and Launceston in Cornwall, southwest England; and in Derbyshire and adjacent territory in the Midlands of England. The ore of North Wales consists mainly of carbonate with some silicate and oxide in Cambrian rocks; that of England is psilomelane and pyrolusite in lower Silurian strata.

Other Continental Sources.

Manganese ore is found in different parts of Austria-Hungary, namely, in Bukowina, Carniola, Moravia, Bosnia, Herzegovina, Transylvania, and Bohemia. At Roffna,

in Overhalbstein, in the Swiss Canton of Graubunden, manganese ore occurs as beds in slates of Jurassic or Tertiary age. The ores are pyrolusite, polianite, and psilomelane penetrated by quartz veins and grading into quartz slate and red jasper.

The chief manganese deposits in Italy are on Monte Argentario, at Carrara, at Rapollano, and on the island of Elba, in Tuscany; at Turin and Pralognan, in Piedmont; and at Gambatesa, in eastern Liguria. There are small mines at Iglesias, on San Pietro Island, off the west coast of Sardinia. Manganiferous iron ore occurs in Tuscany in the Apennines, near Florence. Manganese ore averaging 73 to 75 per cent oxide and manganiferous iron ore have been reported from Salerno, in Campania, on the coast south of Naples. Manganiferous iron ore containing 18 to 19 per cent manganese and 34 to 35 per cent iron occurs at Laurium, in Greece. Manganese ore is found in small amounts in several localities, among which are Cape Vani, on the island of Melos, and Fourkovuni Point, also in the Cyclades.

Manganese ores occur both in European and in Asiatic Turkey. In the former they are found in southern Macedonia, the shipping port being Straton, on the *Ægean* Sea. In the latter they are reported from Aptal in Trebizond, in northern Asia Minor, near the Black Sea, and also from Flatza, in the same region. On the island of Cyprus, off the south coast of Asia Minor, manganese ores occur at Strullos, near Larnaka.

Russia has been for many years the leading producer of manganese in the world. By far the largest part of the ore has come from the Sharopan district in the Province of Kutais, Transcaucasia, on the Asiatic slope of the Caucasus Mountains. Smaller amounts of ore have been produced in the Nikopol district in the Province of Ekaterinoslav in south Russia, and in the Provinces of Perm and Orenburg in the Ural Mountains.

Africa, Asia, and Oceania.

Large deposits of manganese ore occur in Tunis near Ain-Mulares. The quantity available is said to reach 1,000,000 tons. An important discovery of manganese has recently been made at Caledon, Cape Colony. The deposit is said to contain 30,000 tons of ore with a manganese content of 42 per cent. Manganese ores, manganiferous iron ores, and iron ores occur together in deposits in carboniferous rocks on the Sinai Peninsula east of the Gulf of Suez. Manganese ore is found in the Madras and Bombay Presidencies, in Central India, in the Central Provinces, in Bengal, and in Lower Burma. Small deposits of manganese ore, containing 1.61 per cent of cobalt, occur at Ampituja, Ceylon. Moderate quantities of manganese oxide are mined yearly in Japan, but the deposits are not extensive.

Manganese deposits are found in the Philippine Islands in the Provinces of Ilocos Norte and Tarlac, on Luzon Island, and on Masbate Island. They have also been exploited in the regencies of Pegasin and Mongolaen in Java, and a small amount of ore has been shipped from the island. Beds of manganese ore were recently discovered at Taritipan, in Maruda Bay, British North Borneo. The manganese ores of New Zealand consist mainly of braunite and wad, with pyrolusite here and there in small quantities. The principal work has been done near Russell and at Waiheki. The ore contains 75 per cent oxide of manganese. At the Bay of Islands, Napier, an ore with 45 per cent manganese is found. In Australia there are manganese deposits in New South Wales, South Australia, and Queensland.

A Further Advance in Australian Shoe Prices.

The higher prices for shoes in Australia noted in Daily Consular and Trade Reports on February 28 and April 1, 1911, are to be still further advanced, according to the published views of the president of the Boot, Shoe, and Slipper Manufacturers' Association of New South Wales, a newspaper report of which has been transmitted by Consul General John P. Bray, of Sydney. A 10 per cent advance in the price of leather by the Tanners' Association of Victoria, heavy duties on materials (practically all of which must be imported), a scarcity of female labor, and high wages are said to have made this increase inevitable.

Walnut timbers, sales of which are being held at Batum, Russia, are said to result in prices of \$535 per ton.

SWISS GOVERNMENT AID TO COMMERCIAL SCHOOLS.

[From Vice Consul Eugene Nabel, St. Gall.]

The total grants for commercial education made by the Swiss Government in 1911 amounted to \$185,565, against \$165,311 in 1910. The various grades and number of schools, attendance, and Government grants received last year were as follows:

Commercial high schools, 4; located at St. Gall, Zurich, Fribourg, and Neuchatel; total operating expenses, \$35,542; 326 male and 12 female pupils; school fees collected, \$3,582; Government grant, \$10,172.

Commercial schools, 31; total operating expenditures, \$347,373; 2,592 male and 1,394 female pupils; school fees collected, \$57,287; Government grant, \$93,660.

Mercantile secondary schools: To this class belong (a) 80 schools of the Swiss Commercial Union; total operating expenditures, \$140,728; 8,726 male and 2,240 female pupils; school fees collected, \$31,235; grants from Government, \$53,387; from Cantons, \$24,188; from districts, \$19,416; from corporations, \$11,413; (b) 35 other single associations and district secondary schools; total operating expenditures, \$23,702; 2,716 male and 1,897 female pupils; school fees collected, \$5,426; grants from Government, \$8,115; from Cantons, \$5,085; from districts, \$3,491; from corporations, \$1,008.

Administration schools, which especially prepare young men for the Federal post, telegraph, telephone, and customs service, located at St. Gall, Zurich, Bienne, and Geneva; total operating expenditures, \$29,815; pupils, male only, 360; school fees collected, \$1,558; Government grants, \$9,346. These schools received their first Government grant in 1911.

For miscellaneous purposes \$10,885 was expended, including \$4,689 for scholarships, \$2,064 for apprenticeship examinations, and \$1,786 for libraries and lectures.

A new commercial high school was opened at Lausanne in 1911, which has not yet received a Government grant, but has been assured of it during the present year.

The Federal Department of Commerce has been making persistent efforts to induce the Cantons and districts to increase their subsidies to mercantile secondary schools.

[Extensive reports, describing the entire Swiss school system, with special reference to commercial education, were published in Daily Consular and Trade Reports for Mar. 10, 1909, and Aug. 11, 1911.]

AMERICAN STAGE COACHES IN HONDURAS.

[From Consul A. T. Haeberle, Tegucigalpa.]

As a result of a request for catalogues published in Foreign Trade Opportunities, two American coaches have been ordered by Dr. Guilbert of this city, with whom the Government of Honduras has entered into a four-year contract for carrying the mails between San Lorenzo (on the south coast) and Tegucigalpa. The new service will start August 1. The coaches, which will also carry passengers, will make the trip in two and one half days, connecting with the Amapala mail boat.

ECONOMIC EFFECTS OF BRITISH COAL STRIKE.

[From Consul General John L. Griffiths, London.]

Numerous estimates have been made of what the six-weeks' coal strike has cost the United Kingdom. The estimates have varied from \$72,997,500 to \$243,325,000.

The estimate of the London Daily Mirror of \$122,635,800 is probably not excessive when the almost infinite ramifications of such a gigantic strike are borne in mind. This estimate was made up as follows:

Railway traffic losses to Apr. 6, 1912.....	\$15, 572, 800
Miners' wages during the strike.....	29, 199, 000
Wages lost by other trades.....	9, 733, 000
Strike and out-of-work allowance paid by miners' and other unions and withdrawal of savings.....	7, 299, 750
For various forms of relief, feeding children, etc.....	2, 433, 250
Losses sustained by various industries and businesses other than mining.....	58, 398, 000
Total.....	122, 635, 800

Increase Cost of Living—Lost Working Time.

In the foregoing figures the increased cost of living is not taken into consideration. This was a very large item, as almost everything that went on the table cost more after the strike was inaugurated than it did before, and the difference in practically every instance was directly attributable to the strike itself. It may be, therefore, that the estimate of the London Daily Telegraph placing the loss at \$243,325,000 will prove to be not an exaggeration.

In the first week of the strike over 2,000,000 working days were lost in the coal-mining industry alone, while in the second week the miners, together with the carters, contractors, and others, lost approximately 6,700,000 days. It is thought that the strike will entail a loss of at least 25,000,000 working days to the coal miners. It is impossible to state with any accuracy the time lost by workers in other industries which were shut down or run on greatly reduced time in consequence of the strike. Many of the trade unions, by reason of the drain upon their resources, suffered greatly. This was especially true of the metals, engineering, shipbuilding, railways, building, glassworkers, paper makers, seamen, dockers, sweetmeat makers, pottery workers, carters, dye workers, and textile unions.

The present losses do not, of course, embrace all that can be attributed to the strike, because it will be some time before all the collieries are at work again and a considerable period before the industries which have been most seriously affected resume their normal condition.

Suggested Remedies.

Many suggestions have been made, such as the nationalization of the mines, compulsory arbitration, making the funds of trade unions liable for the acts of individual members when associated together for strike purposes, etc., for the prevention of future strikes.

The suggestion which seems to meet with the greatest favor, however, is that of the extension of the principle of cooperation which has worked so successfully in many instances. It is felt that if the wage earner, upon some proper basis, can be taken into partnership with the employer, so that a real community of interest may be established, this will accomplish more than can be secured by any artificial and arbitrary legislation.

Wage earners have had a very substantial grievance in many industries through the enhanced prices of the general commodities of life without any corresponding increase in their wages. This cause of complaint and resentment, developing often into active antagonism, would largely disappear, it is urged, if the principle of cooperation could be generally introduced into the industrial world, so that in times of prosperity the employee would feel that he is receiving his fair proportion of the profit.

Opportunities for American Coal.

The effect of the British strike will be to widen markets for the coal of other countries. At least, this will be the temporary effect; and if the feeling should prevail that the present settlement lacks finality or that industrial disturbances will probably be frequent and prolonged in the United Kingdom, there is no reason why the American exporter of coal should not find for his product an outlet abroad which has hitherto been difficult to secure.

It is possible that the maximum British production has been reached since it is intimated that a number of the smaller collieries will remain closed, and the economy that has been practiced in the use of coal for the past few weeks will, to a considerable extent, long continue. The strike has also directed attention to substitutes for coal which will, it is thought, ultimately greatly restrict its use.

[Previous reports on the effects of the British coal strike were published on Apr. 17.]

NEW ENGLISH BOTTLE MACHINE.

[From Consul Frederick I. Bright, Huddersfield.]

One of the most important nontextile industries in the district about Dewsbury, a town of 75,000 inhabitants midway between Huddersfield and Leeds, is the manufacture of glass bottles. American bottle and jar machinery is already represented at Dewsbury and in other Yorkshire towns where glass products are made.

A recent invention for glass-bottle manufacture, the following particulars of which were furnished by a director of a Yorkshire company, permits of the use of 20 to 24 molds at one end of an ordinary Siemens furnace. With this new machine the bottle ring is made and removed from the ring mold first, the ring and body of the bottle maintaining an even heat and perfect regularity in cooling. There are special molds for making small rings, such as crown-cork rings, which overcome the tendency to crack. Special slides or grooves on which the ring molds work permit of a good joint at the top of the ring, and there is also a device whereby the tops of crown-cork rings, sure-seal bottles, etc., can be made in one complete ring without a joint and yet leave the bottle in the mold to cool.

There are many other labor and time saving features of the new machine. [Consul Bright's complete report will be loaned by the Bureau of Manufactures to interested firms.]

Immigration into Canada for the month of March showed a gain of 7 per cent over March last year. The total arrivals for the fiscal year ended March 31, 1912, were 354,237, of whom 133,710 came from the United States. Arrivals from the United States for the previous fiscal year were 121,451.

AMERICAN PURCHASES IN LONDON.

[From Consul General John L. Griffiths.]

The declared exports through the London consulate general to the United States for the three months ended March 31, 1912, aggregated \$41,777,327, as compared with \$28,885,267 for the three months ended March 31, 1911. Aggregate amounts of leading items for the first quarter of this year with the increase or decrease compared with the same period last year follow:

Articles.	Value.	Increase or decrease.	Articles.	Value.	Increase or decrease.
Automobiles and parts of..	\$107,138	+ \$40,433	Mustard.....	\$140,153	- \$10,042
Beer.....	210,713	- 40,975	Oils.....	559,862	- 107,535
Books.....	477,143	+ 27,414	Paper and paperhangings..	111,000	- 1,340
Boots, shoes, etc.....	22,075	- 6,077	Paper stock.....	138,082	- 76,704
Bristles.....	293,361	+ 101,712	Precious stones.....	2,204,301	+ 76,916
Brushes, tooth and hair..	36,494	- 6,969	Preserves, pickles, etc.....	180,163	- 161,033
Cocoa and chocolate.....	238,103	- 3,378	Provisions, cheese, bacon, etc.....	162,883	- 28,320
Drugs and chemicals.....	969,982	- 128,450	Rubber:		
Feathers.....	897,566	- 20,048	Raw.....	7,071,226	+4,090,568
Floor cloths.....	219,955	- 66,010	Clothing and manu- factures.....	118,018	+ 33,604
Fruit, nuts, and vege- tables.....	937,083	+ 859,409	Seeds, plants, etc.....	576,175	+ 175,345
Gloves, hosiery, etc.....	156,571	+ 74,741	Shells.....	330,459	+ 95,243
Glue and gelatine.....	38,172	+ 21,063	Silks.....	101,795	- 111,399
Glycerine.....	247,567	+ 86,440	Skins, furs, etc.....	3,657,562	+ 915,928
Gums.....	130,547	+ 33,843	Stationery.....	133,503	- 16,484
Hair, cow, calf, etc.....	189,324	+ 4,661	Straw plait and braids... Tea.....	457,328 847,496	+ 326,104 + 111,559
Hats and caps.....	209,394	+ 13,330	Wearing apparel.....	121,151	+ 9,422
Hemp, flax, and tow.....	228,455	+ 180,736	Wines and spirits.....	288,538	- 34,449
Ivory.....	116,979	+ 18,278	Woods.....	118,642	- 19,706
Leather.....	127,919	+ 57,564	Wool, camel and goat hair..	918,349	+ 92,951
Metals:			Woolens and worsteds....	470,016	- 76,245
Aluminum.....	154,483	+ 66,737	Pictures, sculptures, etc... Antiques, furniture, etc...	808,121 5,409,337	+ 57,931 +4,979,840
Platinum.....	147,735	+ 607			
Tin.....	9,032,934	+1,891,483			
Other metals.....	296,597	- 269,669			

The large increase in the last item is greatly due to the shipment to the United States of a portion of J. Pierpont Morgan's collection.

Olive-Oil Production in Italy.

Consul General James A. Smith, of Genoa, reports that, according to figures furnished by the Ministry of Agriculture, the production of olive oil in Italy was 67,601,230 gallons in the season of 1909-10, 37,142,372 gallons in 1910-11, and 65,170,862 gallons in 1911-12. Dealers usually make their estimates of oil production upon a uniform average of 20 per cent of oil to the weight of the olives, but the percentage of oil produced during the last three years actually works out at 16.73 per cent in 1909-10, 15.03 per cent in 1910-11, and 17.5 per cent in 1911-12.

Rail Prices for Egyptian Lines.

The firm of J. Hug & Co., of Cairo, writes to the Bureau of Manufactures that the adjudication of March 15, 1912, for the supply of Vignole rails for the Egyptian State Railways, resulted in the tender of the Stahlwerks Verband, Aktien-Gesellschaft, at \$33.12 per metric ton, being accepted. The order is for 6,000 tons of 47-kilo (103.62 pounds) per meter rails, and 2,700 tons of 30-kilo (66.14 pounds) per meter rails. The rails are to be made by Fried. Krupp, and delivered at Gabbary.

RETAIL SHOP COMPANIES IN ENGLAND.*[From the Economist, London.]*

From the stock exchange point of view the large shopkeeping companies, doing business through a number of shops controlled from one center, are well worth following, especially for one who has a good knowledge of retail trade. Such a company depends for its success almost entirely on the quality of its organization and management.

Statistics regarding 12 such large companies show that the profit returns for some of them have increased steadily during the past three years, some have stayed at about the same level, and one or two have decreased heavily. Most of the decreases are attributed by the directors to the increased cost of raw materials, and it is a fact often overlooked in the talk of increased cost of living for the poor that the middleman does not always recover the full wholesale raise in prices from his customers.

It is commonly assumed that joint stock companies can beat their small competitors out of the field merely by their size. In fact, however, the big companies have not invariably been successful since they were turned into joint stock concerns, and it is clear that the managers of these businesses are scarcely less liable than the small capitalist to give way to the temptation of loose control and overstrained capital. One company which was floated as a public joint stock company in 1898 and soundly financed, gave a profit of \$320,000 the first year after the publication of its prospectus, and its profits have now grown to \$2,355,000 a year. This company has paid an ordinary dividend of 6 to 10 per cent a year and the deferred dividends have run from 21 to 200 per cent.

On the other hand a firm which did an enormous business when first floated, but which, partly on account of overcapitalization and partly owing to more recent causes, has not met with much success as a joint stock company, is doing worse now than before its flotation. The first prospectus of this company was issued in 1898 and showed a profit (before deduction of interest) of over \$360,000 for the preceding year, while in 1911 its net profits were \$614,000. In the meantime large sums of new capital have been raised and a new source tapped through the opening of a savings bank paying interest at 3½ per cent. A fresh argument against this last undesirable combination of the grocery business and banking is found in the present industrial situation, when the working classes must draw on their savings, such a drain tending to leave the business short of working capital.

A firm of boot and balata manufacturers and retail shopkeepers has done badly since its stock was floated in 1908, profits dropping from over \$290,000 in that year to about \$28,000 in 1911. As this company manufactures on a large scale, it is difficult to say where the decline in profits has occurred, the directors attributing it to the increased cost of balata.

BRITISH ENGINEERING AND SHIPBUILDING AGREEMENT.*[From the London Times.]*

In the hope of preventing stoppages of work in shipyards and engineering establishments owing to disputes between workmen arising from claims to do certain classes of work, an agreement to be known as the demarcation agreement, 1912, has been drawn up between the Shipbuilding Employers' Federation, the Engineering Employers' Federation, and the Shipbuilding and Engineering Trades Federation, to which 20 of the trade unions in the engineering industry are affiliated. Both employers and employed have been recommended by their representatives at the joint central conference to accept the agreement, and a ballot is now being taken.

The agreement, which is to come into force on July 1, in the districts of Aberdeen, Dundee, East of Scotland, Clyde, Tyne, Wear, Tees, and Hartlepool, Barrow, Liverpool, Birkenhead, and Hull, provides that there shall be no stoppage of work nor shall men be paid off in consequence of disputes on demarcation questions. Failing mutual settlement the local management will give a temporary decision, which will be accepted by all parties pending a decision from a local joint committee, which when given "shall be final and binding on all parties for at least twelve months," after which it may again be brought to the joint committee for review after three months' notice has been given.

Concrete contract.—One London company has a contract for 110 miles of 1.7 by 1.2 and 1.5 by 1 meter concrete pipes for the Baku (Russia) waterworks conduit.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

No. 8733. Hollow brassware.—An American consul in a Latin-American country reports that a new vehicle and furniture manufacturing establishment in his district is about to install a department for the manufacture of iron and brass bedsteads. The manager of this concern has requested the consul to put him in touch with American firms manufacturing hollow brassware suitable for use in the manufacture of bedsteads. He desires to obtain at once catalogues and lowest export prices from American firms handling these goods.

No. 8734. Steel office furniture.—A business firm in a Mediterranean country informs an American consular officer that it desires to be placed in communication with American manufacturers of steel office furniture. A member of this firm has inspected several articles of this kind in the office of the consulate and is of the opinion that a large demand could be created for similar furniture. References can be furnished, and correspondence should be in French or Italian.

No. 8735. Material and equipment for tramways.—A wholesale firm in electrical supplies in a European country desires to receive catalogues, price lists, and particulars from American manufacturers of material and equipment for electrical tramways (cars excepted), such as trolleys, switches, novelties, etc. Correspondence may be conducted in English, and the consul submitting the report states that it should be addressed direct to the firm in question.

No. 8736. Chemical products, pharmacy, arts, and industry.—An American consul in a European country reports that a firm in his district, manufacturing and dealing in chemical products for chemistry, pharmacy, arts, and industry, desires to become agent of an American factory of similar products. Correspondence should be addressed direct to the firm and should be in French.

No. 8737. Extract of Virginia tobacco.—An American consular officer in India has received an inquiry from a business firm in his district for information regarding the sources of extract of Virginia tobacco recently put on the market for flavoring purposes. Correspondence is desired with such firms as soon as possible.

No. 8738. Drugs, medicines, and chemicals.—The manager of a firm in a European country has called upon an American consulate to state that he desires to secure the agency for such medicines, drugs, and chemicals as it might be possible to sell there, and he wishes to consider offers from American manufacturers of these lines. He states that he has studied the market carefully, and he will be able to inform manufacturers whether or not their products can be sold there. There appears to be a good market for this class of goods, and a few American specialties of this nature are now found on sale, these goods reaching the market through English agencies.

No. 8739. Tenders for dredging.—The American consulate general at Ottawa, Canada, reports that the Department of Public Works has advertised for tenders, to be received until May 15, 1912, for dredging required at the following places in the Province of Quebec: Woodland, Vercheres, Varennes, and Lavaltrie. Combined specifications and form of tender can be obtained on application to the Secretary, Department of Public Works, Ottawa. Dredges and tugs owned and registered in Canada must be employed in the performance of the work contracted for.

No. 8740. Cotton goods.—One of the commercial agents of the Department of Commerce and Labor reports that a firm in a foreign country which represents one line of American goods is very anxious to get in touch with manufacturers of cotton goods such as sheetings, drills, denims, gingham, and flannels. The firm is reputed to be strong financially and is prepared to do a good business. All the members of the firm speak English, and correspondence may be in that language.

No. 8741. Construction of port railway.—The American consul at Montevideo, Uruguay, reports that tenders are called for the materials for the construction of the port railway of Montevideo by the Minister of Public Works. Plans and specifications cost \$5.17. Tenders will be opened June 4, 1912.

- No. 8742. Expanded metal and other fittings for buildings.**—An American consular officer reports that about 10,000 square yards of expanded metal for concrete roofing were recently imported into his district and created an immediate demand. It is estimated that about 500,000 square yards of this material can be disposed of annually in his district. He also states that most of the locks, bolts, hinges, and other iron and steel fixtures for buildings, which have been imported have proved unsatisfactory. There is a demand for a better make at slightly higher prices. A local firm desires catalogues and price lists of these articles.
- No. 8743. Tenders for engine.**—Sealed tenders will be received at the office of the city clerk, Moncton, New Brunswick, until May 15, 1912, for one combination pumping engine and hose cart as follows: 700 gallons capacity, 90 to 100 horsepower, 6-cylinder motor, speed 50 to 60 miles an hour, hose capacity 1,200 feet 2½-inch hose, gasoline capacity 25 to 30 gallons, wheel base at least 150 inches, wheel artillery type, locomotive bell; also one pumping engine as above without hose cart, and one steam fire engine of above capacity, to be hauled by horses. Detail specification with list of equipment to accompany each tender. Prices quoted to be f. o. b. Moncton, New Brunswick.
- No. 8744. Red-pine boards and pitch-pine beams.**—A business firm in Germany informs an American consulate that it would like to represent as agent for a section of that country an American exporter who can furnish red-pine boards and pitch-pine beams.
- No. 8745. Ordnance supplies.**—An American minister in a foreign country has submitted a report regarding the manufacture and purchase of projectiles and ordnance supplies in the country in which he is located. Copy of this report, giving detailed information, can be obtained by interested manufacturers upon application to the Bureau of Manufactures.
- No. 8746. Panama and straw hats.**—An American consul in a Mediterranean country reports that there is a good sale in his district for Panama and common straw hats. As the weather is warm, straw hats are worn a good part of the year. The consul writes that in his opinion this market can be increased, if American hat dealers will correspond with local merchants, a list of whom accompanied the report.
- No. 8747. Galvanized sheet iron.**—A foreign business firm has written to an American consular officer in the United Kingdom that it desires quotations for galvanized sheet iron, the quantities required being in lots of 100 tons, there would be repeat orders in increased quantities. The size of sheets should be 6 feet 3 inches by 2 feet 2 inches, or 9 feet 4 inches by 3 feet 3 inches. Separate quotations are required for 24 and 26 gauge. In quoting terms should be given c. i. f. net cash for the following ports: Adelaide, Melbourne, Sydney, Brisbane, Auckland, Wellington, and Buenos Aires.
- No. 8748. Hickory handles or hickory wood split for making handles.**—An American consul in a European country reports that a business man in his district wishes to purchase hickory handles for tools or hickory wood split in shapes suitable for making tool handles. He wishes prices quoted to include freight and also the local import duties. In other words he wishes the timber or handles delivered at a certain city freight and duty paid. The duty on tool handles by special decision is \$3.05 for 220 pounds, dyed or polished \$4.87.
- No. 8749. Sirup.**—In response to inquiries from the United States, an American consul in the United Kingdom reports that several firms in his district were interviewed regarding the matter of placing American sirup on that market, and it appears that there is no chance of an order resulting unless a sample is first submitted. Color, flavor, and density all points to be considered, and it is desirable that samples sent should contain two or three pounds and that the samples should represent the quality of the whole of the proposed shipments. Copy of the complete report, containing the names of local firms that have been interviewed and have expressed a desire to correspond with American sirup merchants, as well as the name of a merchant who is now visiting the United States and who is interested in the purchase of this article, can be obtained from the Bureau of Manufactures.
- No. 8750. Ivory-nut buttons.**—A foreign merchant informs an American consular officer that he is in the market for ivory-nut buttons of all sizes up to 55 and 60 millimeters (1.35 to 1.52 inches) in diameter. Offers should be in German. References are furnished.

CARRIAGE STYLES IN BURMA.

[From Consul M. K. Moorhead, Rangoon.]

The only carriages imported into Burma for sale come from Calcutta and Madras. No English or foreign made vehicles are imported, except by individual users. The majority of horse-driven vehicles in use in Burma are manufactured locally or in India; those imported from England or the United States are purchased direct by the users and not through local dealers. The value of carriages and carts imported into Burma during the fiscal year ended March 31, 1911, by countries, was \$109,665, divided as follows: United Kingdom, \$34,580; Ceylon, \$3,000; Belgium, \$2,855; United States, \$1,574; Germany, \$632; other countries, \$78; India, \$66,946.

The styles mostly used in Burma are 2-wheeled dog carts and buggies with syce's seat or step behind. The tops to the buggies must have closed sides (hood shaped) and be capable of being turned back. All vehicles have rubber tires and are fitted with foot bells. Local made buggies sell on the average for \$165, while those imported from India sell as high as \$400. Phaetons or victorias are also used to a considerable extent. In these vehicles the coachman's seat is usually raised up above the level of the floor and the cover is hood shaped.

[A list of coach works which manufacture locally and import from India all classes of vehicles is obtainable from the Bureau of Manufactures.]

SALE OF SHEET METAL IN NORWAY.

[From Vice Consul General Haakon E. Dahr, Christiania.]

One thousand five hundred tons of galvanized sheets and 25,000 tons of black sheets are imported annually into Norway, the former coming from Germany, England, and America and the latter mainly from Germany. The thinner galvanized sheets are mostly of American origin, but are purchased through British agents; those sold under the name "Apollo" are best known here. The thicker galvanized sheets are imported from Germany and Belgium.

Prices vary greatly, but at present (Mar. 23, 1912) German ship sheets 5 millimeters (0.197 inch) thick cost about 130 marks per 1,000 kilos (\$28 per short ton), f. o. b. shipping ports, net 30 days. Galvanized sheets from Germany sell at present as follows: No. 10, \$41 per short ton; No. 12, \$43; No. 14, \$45; No. 16, \$48; all prices f. o. b. Rotterdam or Antwerp. The American "Apollo" sheets, No. 22, cost about \$57 per ton.

[A list of persons who might act as agents may be had upon application to the Bureau of Manufactures.]

Cotton Goods Investigations in Levant.

Commercial Agent Ralph M. Odell has concluded his investigations of the cotton goods trade and industry in the Balkan States and Turkey. He is now proceeding to Egypt, Aden in Arabia, Abyssinia, and other East African countries to continue his work. The Bureau of Manufactures invites inquiries and correspondence relating thereto, covering textiles and affiliated products.

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FOREIGN TARIFFS.

AUSTRALIA.

[From Consul General John P. Bray, Sydney.]

Decision Against Export Duty on Ores.

A bulletin has been issued by the Minister for Trade and Customs announcing that after an exhaustive inquiry the Government of Australia has decided not to place an export duty on ores. While some temporary advantage might be obtained by such a duty, it was decided that it would not benefit the mining industry. It was considered that such a check on the marketing of Australian ores would prove a dangerous experiment, and detrimental to the best interests of mining development. Some ores can be treated with distinctly greater advantage abroad, where they meet more suitable ores for mixing, and operations are cheaper.

"Mining is one of our greatest primary industries and one in which an army of workers is vitally interested," adds the official bulletin. Australian mining has to face world competition, and to be successful it needs every advantage possible.

CANADA.

[From Consul General John G. Foster, Ottawa.]

Reciprocity Agreement with British West Indies.

The representatives of the British West Indies met with the representatives of Canada in numerous conferences, beginning March 27, 1912, and on April 9, 1912, a reciprocity agreement was signed. While the statement given out to the press does not indicate definitely the scope of the agreement, it is assumed that the draft agreement formulated by the Canada-West Indies trade commission has to some extent been followed. It is to be observed that in the

Ottawa conference Grenada, the Bahamas, Bermuda, Jamaica, and British Honduras were not included.

The following authorized statement relative to the agreement was given out to the press (from Ottawa Citizen, Apr. 10, 1912):

An agreement was signed in duplicate to-day by the representatives of the West Indian colonies and the Government of Canada. It was the result of five days' sitting in conference and a deal of steady work done outside the conference by subcommittees.

The agreement is made for a term of years and revocable at the end of the period named therein on one year's notice. It includes exchanges of products on a wide and generous scale and is based on a preference to the products of each country in the markets of the other.

The agreement goes to the Governments of the colonies included for consideration, and comes into effect when approved by both the Dominion and the colonial legislatures, and His Majesty's Secretary of State for the Colonies. It will be possible for all these to consider and decide, and for the agreement to go into effect before the beginning of the year 1913. Judging by the instructions given to the various delegates by their respective Governments, and the evident good will and harmonious cooperation shown by them in the sessions of the conference, it is anticipated that no objection will be made to the speedy ratification of the agreement.

The agreement is between Canada and the interested colonies alone, and leaves both with complete liberty to adjust their tariffs as respects all other countries. Grenada, the Bahamas, Bermuda, Jamaica, and British Honduras are the only British West Indian colonies that are not included, and for these the latch string is left on the outside of the door, and the lamp kept burning in the window, with a warm welcome certain for them when they come.

The questions of improved steamship communications between Canada and the West Indies were carefully considered, and the views of the conference were embodied in resolutions unanimously passed. The objective of these resolutions is to effect an up-to-date and adequate cable and steamship connection, based upon the cooperation of the West Indian colonies and the Dominion of Canada and the Government of Great Britain. Inasmuch as the agreement is to be submitted to the various Governments concerned for their consideration and approval, it is not advisable to give the details thereof at present to the public.

Proposed Increase in Ship Subsidy.

The Dominion estimates for the fiscal year 1913 contain provision for an increase in the subsidy for steamship service between Canada and the West Indies from \$60,000 to \$150,000.

[In Daily Consular and Trade Reports for Mar. 9, 1912, was given a brief summary of the preliminary draft of the proposals for reciprocity, to which, in a general way, it is suggested the agreement corresponds.]

CUBA.

[From Cuban Customs Circular No. 12, Mar. 26, 1912.]

Duty on Lubricating Oils.

A decision has been rendered by the Cuban customs officials to the effect that 30 days after the publication of the present circular all lubricating oils, whether derived from shale or from petroleum, excepting crude oils (as defined in the tariff) mixed with vegetable or animal oils, shall be dutiable under tariff No. 7.

It appears that under the accepted interpretation of a previous decree shale or petroleum lubricating oils have been treated as dutiable under tariff No. 6 (crude oils), even when not mixed with other oils. In the tariff "crude oils" has been defined as covering, in the case of shale oils, only those obtained from first distillation, with a density of 0.9 to 0.92°; and in the case of petroleum oils, those in the state in which extracted from the well, having undergone no operation whatever whereby the chemical composition has been altered or modified.

In the present circular it is held that there can be no such thing as a crude shale lubricating oil, because if a shale oil be a lubricant it can not conform with the requirement of density given in the definition of crude oils; and if the lubricating oil be derived from petroleum, it can not be in the natural state in which it was extracted from the well. Hence shale and petroleum lubricating oils are to be dutiable as refined lubricating oils under tariff No. 7 at a general rate of \$3.50 per 100 kilos (220.46 pounds) and at the rate of \$2.80 per 100 kilos if imported from the United States.

Crude shale oil and crude petroleum oil, as included under the definition of those products given in the tariff, if mixed with animal and vegetable oils, for lubricating purposes, remain dutiable under tariff No. 6 at \$1.40 per 100 kilos, general rate, and \$1.12 per 100 kilos, preferential rate to United States.

NEW ZEALAND.

[From Official Gazette, Feb. 15, 1912.]

Customs Declaration for Baggage and Personal Effects.

When it becomes necessary to require any passenger to New Zealand to make a declaration to satisfy the collector of customs that the baggage and effects of the said passenger are exempt from customs duty, it is ordered that the form given below shall be made out and signed in the presence either of a customs officer, a postmaster, or a solicitor:

Port of —, —, 191—.

In the ship —, from —.

Marks, numbers, or address.	Number and description of packages.	Examination account.

—, *Examining Officer.*

I, — [name in full], do hereby declare that the packages above described contain only passengers' baggage and effects, including only wearing apparel and other personal effects that have been worn or in use by —; also — implements, instruments, and tools of trade, occupation, or employment not exceeding fifty pounds sterling in value, and — household effects not exceeding one hundred pounds sterling in value, used by — abroad for more than a year; that — entitled by law, as passenger to this Dominion by the — [name of the ship], arrived — [date of her arrival in the Dominion]; and I further declare that none of the above goods is intended for any other person or persons, or for sale.

(Signature.) —.

PORTUGAL.

[From American Minister Cyrus E. Woods, Lisbon.]

Proposed Payment of Customs Duties in Gold.

A bill has been introduced in the Portuguese Congress requiring that all customs duties be paid in gold, instead of in paper money, as at present. Its purpose is to increase the revenues of the country, as gold is at a considerable premium. The bill has not yet been discussed, and I am advised that it will not be taken up before the reassembling of the Congress in November, 1912. There is reason to believe that the bill will be passed, as it is an administrative measure.

[From L'Economiste Européen, Apr. 5, 1912.]

On March 22, 1912, the Minister of Finance of Portugal laid before the Chamber of Deputies a bill proposing that the customs duties shall be paid in gold. Portuguese gold money will be accepted at its nominal value, as will sovereigns and gold coins of the Latin Union, and substantially guaranteed drafts on London, Paris, Brussels, Berlin, and Amsterdam, in terms of pounds, francs, marks, and florins, will be accepted at their par value. The Government proposal has already given rise to considerable criticism, especially on the part of the importers, and to a protest by the Chamber of Commerce of Oporto. The premium on gold has varied from 8 to 10 per cent during the past few months. The adoption of payment of customs duties in gold would, accordingly, be equivalent to an increase in the customs duties to that amount.

Effect of Proposed Change on German Treaty.

The Handelsmuseum of April 11, 1912, calls attention, in connection with the proposed change in the method of paying duties, to the clause in the German-Portuguese treaty of November 30, 1908, which provides that the treaty can be abrogated on six months' notice, in case of a change in the method of paying duty.

ST. LUCIA.

New Customs Tariff.

The Bureau of Manufactures is in receipt of a copy of a new customs tariff for the island of St. Lucia, British West Indies, enacted March 25, 1912, and in effect April 1, 1912. The customs ordinance of 1907 is repealed.

SALVADOR.

[From Diario Oficial, Salvador, Mar. 9, 1912.]

Proposed Tariff Revision.

The Minister of the Treasury and of Public Credit of Salvador, in a report reviewing the activities of his department during the year 1911, makes mention that the tariff of the country is undergoing careful study, preparatory to the presentation to Congress of a draft of a new tariff. The report is, in part, substantially as follows:

For some time there has been felt a growing need of a revision of the present tariff, not only because of the many additions and changes which have already been made with regard to rates, but also because of obscurity in the nomenclature which gives rise to all sorts of uncertainties, thereby working injury to business and unnecessarily consuming the time of the officials of the Treasury Department.

Therefore, the ministry is at the present time engaged in study preparatory to the publication of a third edition of the tariff, containing the necessary emendations and additions; and to assure greater accuracy, recommendations have been solicited from the experienced merchants of the capital of the Republic in regard to the precise modifications advisable in the distinct divisions of the tariff. To this end a circular was addressed to the business men of the capital.

If possible, the proposed new tariff is to be submitted to the Congress at the present session.

Reduction on Automobiles.

The same report of the Minister of the Treasury and of Public Credit, in a review of the tariff changes during the year 1911, records a reduction in the "aforo" on automobiles from 10 centavos to 5 centavos per kilo. The duty, calculated on that figure, including surtaxes, amounts to about 5 cents per pound.

Duty on Lumber.

In order to avoid the too rapid depletion of the forests within the country, a decree of December 7 provides that the duty on imported lumber, in planks or in other pieces, whether rough, planed, or dove-tailed, shall be reduced to 3 centavos silver per kilo, and that lumber shall be exempt from all surtaxes. [The silver peso of Salvador, consisting of 100 centavos, = \$0.423, Apr. 1, 1912.]

SWITZERLAND.

[From Consul George Helmrod, Berne.]

Prohibition of Artificial Wine and Cider.

The Federal Assembly of Switzerland has issued a decree prohibiting, from January 1, 1913, the importation, manufacture, keeping in store, exposing for sale, and the sale of artificial wine and artificial cider. The only exception made to the prohibition is that such wine and cider may be kept for family use, under certain regulations provided for the purpose. Artificial wine, as embraced in the present prohibition, is any beverage resembling wine, made either from raisins, grape skins, wine lees, residues from the distillation of wine, or of tamarind fruits, figs, malt, by mixing with wine or by any other process; wine made by the Gall process, contrary to the rules laid down by the Government; watered wines; mixture of any of the products described above with wine or must; mixture of cider or the juice of berries, whether or not fermented, with wine or must. Under the definition of artificial cider is included any beverage resembling cider, manufactured entirely or in part from fruits other than the apple and similar fruits, and cider watered to such an extent that it does not fulfill the requirements laid down by the Government. For the importation of artificial wine or artificial cider the penalty will be fine, or imprisonment, or both. [This decree is subject to the referendum.]

TRIPOLI.**Customs Duties.**

Consul John Q. Wood reported that in December, 1911, the Italian Governor General announced that the rate of customs duty on goods imported into Tripoli would remain at 11 per cent ad valorem (the rate in force under the Turkish tariff), with the exception that the duty on barley, wheat, flour, macaroni, rice, dried fish, sugar, coffee, tea, and petroleum would be 4 per cent ad valorem. The importation of arms and ammunition, salt, and tobacco was prohibited.

Under date of March 28, 1912, Consul Wood reported that the tariff law had been changed to allow the free admission of tanned goatskins, and crude ostrich feathers, on condition that they shall be exported within six months. In the words of the Governor General's decree, "the object of this concession is to assist these industries which give employment to many poor workingmen in Tripoli. The military operations conducted in this country have cut off all the commerce between Tripoli and the Sudan, from where caravans brought ostrich feathers and tanned goatskins. The exporters of these articles are ordering all shipments to be made via Lagos to Liverpool and other English ports, with instructions to forward to Tripoli.

Because of the cheapness of labor in Tripoli, exporters find that it will pay them to have the goods shipped here to be prepared for foreign markets. Practically all the Sudan goatskins are shipped to Boston, and the ostrich feathers to Paris and London."

UNION OF SOUTH AFRICA.

[From Board of Trade Journal, Mar. 21, 1912.]

Bill Containing New Customs Regulations.

The text of a bill to amend the customs regulations of the Customs Union of South Africa was published in the official Government publication of the Union February 24, 1912. Among the regulations included in the bill is a list of the articles the importation of which shall be prohibited; prison-made goods are in the list.

It is also proposed to impose a dumping duty, over and above the customs duty, equal to the difference between the selling price of the goods for export and the current value of the goods for home consumption, in the case of articles imported into the Union of a class or kind made or produced in the Union, if the export price or the actual selling price to the importer be, at the time of exportation to the Union, less than the current value of the same articles when sold for home consumption in the usual and ordinary course in the country whence they are exported to the Union.

The bill further specifies that when a bounty is granted in the country of origin of an article, an additional duty equal in amount to the bounty on the article shall be collected on importation into the Union.

WEST AFRICAN COLONIES.

[From report of Consul W. J. Yerby, Sierra Leone.]

Customs Regulations.

The attention of American exporters is called to a circular issued by the supervisor of customs at Burutu, Southern Nigeria, containing certain customs regulations applicable to shipments to all West African colonies—French, German, Spanish, and Portuguese, as well as British.

Owing to difficulty experienced in dealing with packages which bear the same marks and numbers, though having come in different consignments, it is suggested that shippers should in the future number consecutively all packages exported to this colony. This would insure that different packages consigned to the same firm but belonging to different shipments would not bear the same number, and there would be no difficulty in distinguishing them immediately. Invoices should be sent along with the goods by the same ship, otherwise the importer may be subject to great inconvenience in complying with the local customs regulations. Where the invoices are made out in terms of foreign money, the equivalent value of the goods in terms of coin current in the colony should also be inserted in the invoice.

The above are the main points in the circular, which also contains some general recommendations about meeting the customs requirements of the West African colonies. [The full report of the consul on the subject is on file in the Bureau of Manufactures.]

CONSTRUCTION WORK ABROAD.**PERU.**

[From American Minister H. Clay Howard, Lima; see also Daily Consular and Trade Reports for Sept. 29, 1911.]

New Line Across the Andes to Amazon Valley.

The Peruvian Congress has passed a bill for construction of the Ucayali Railroad, which will connect the most easterly railway head in Peru with Amazon River navigation. The line will extend 270 miles from Goyllarisquisca, terminus of the Cerro de Pasco Railroad, to the port of Pucalpa, on the Ucayali River. The route will follow the Huallaga River, crossing the mountains which separate it from the Ucayali River, and will cross the extensive Sacramento pampa.

It is planned to run 2,000-ton steamers from Pucalpa to Iquitos, where connection will be made with ocean-going vessels. Steamboats are now operating from Pucalpa 300 miles south on the Ucayali River. Huanuco, 6,000 feet above sea level and with 10,000 population, is the largest city en route.

By the concession, which needs only the signature of the President to become effective, the Peruvian Government will issue \$10,000,000 in bonds, payable in installments with the completion of each 25 miles of the road, to the Amazon & Pacific Railway Co., a corporation organized in New Jersey. The bonds will bear 6 per cent interest, with 1 per cent for a sinking fund, and are to be secured by the tobacco tax. The concession includes the right to extend the railroad 190 miles from Cerro de Pasco to the Pacific coast, and upon its completion a further payment of \$2,500,000 in Peruvian bonds is to be made. Five years are allowed for construction of both branches, which are to become Government property after the concessionaire has operated them for 25 years. In addition to the bonds mentioned Peru is to convey 5,000,000 acres of land, the title to which becomes accomplished when the President approves the bill, the concessionaire, A. W. McCune, having already deposited \$150,000 as security for the execution of the contract.

Speaking of the country through which the road would pass, Mr. McCune said that the Sacramento pampa contains 80,000 square miles and is the largest in the world. The engineers who surveyed the road, he said, were the first of the white race known to have crossed the vast plain, which they found inhabited by about 250,000 people.

The West Coast Leader, a weekly paper of Lima, considers that this railway will be of great strategic and commercial importance, and will open up a vast productive area of eastern Peru, and give direct communication between the capital and the Atlantic navigation system.

ARGENTINA.

[From Consul General R. M. Bartleman, Buenos Aires; figures are in United States currency.]

New Deep-Water Port—Buenos Aires Port Works.

Construction of the deep-water port at Arroyo Parejas, in Bahia Blanca district is proceeding. It will probably be available within two and a half years and will accommodate the largest class of Atlantic steamers. The Régie Générale des Travaux Publiques et

Chemin de Fer, with offices at Talcahuano No. 612, Buenos Aires, has the work in hand. The capital available amounts to \$5,840,000.

Extending the port of Buenos Aires has begun. Offices, warehouses, etc., are being constructed; and there will be three docks, each 550 meters in length and 140 meters wide, provided with cranes, warehouses, railway lines, etc., all to be finished in five years. The total estimate for the work is \$24,500,000. The company undertaking it is the C. H. Walker Co., with head offices at 15 George Street, London, England. The local representative is E. Marsh Simpson, at Alsina No. 339, Buenos Aires.

Estimates for State Railways—An Industrial Zone.

The estimates for the State lines of railways in 1912 have been approved: Administration, \$158,053; management, \$323,723; traffic department, \$4,073,255; technical department, \$2,195,777; total, \$6,750,808.

The legislature of Buenos Aires Province has approved the Government bill reserving 1,000 acres of fiscal land at Ensenada for creating an industrial zone. Limited taxation will be imposed during the first 15 years, and special facilities are to be granted in other forms.

MEXICO.

[From the Daily Herald, Mexico City, Apr. 25, 1912; supplementing reports in Daily Consular and Trade Reports for Apr. 8, 1912.]

Awarding Contracts for Railway Construction.

Bids for constructing the Mexico-Tampico short line and the road between Vera Cruz and Matamoros have been received and contracts will be awarded within the next few days according to information given out at the offices of the National Lines.

The short line from Mexico City to Tampico, which is the more important of the lines which it is proposed to construct, will be an extension of the present National line from Honey, State of Puebla, to a point on the line to be constructed between Vera Cruz and Tamos, 5 kilometers west of Tampico. The Rio Panuco will be crossed at Tamos by a steel bridge, 1,700 feet long, which will be one of the largest in the Republic.

The line to be built between Vera Cruz and Matamoros will follow the Gulf coast for its entire distance, connecting at Tampico with the Monterey-Tampico railroad.

CANADA.

[From Consul General John G. Foster, Ottawa.]

Construction of Wharf at Upper Maugerville.

The Department of Public Works has advertised for tenders, to be received until May 23, 1912, for constructing a wharf at Upper Maugerville, Sunbury County, New Brunswick. Plans and specifications may be seen and form of tender obtained on application to the Department of Public Works at Ottawa.

NETHERLANDS.

[From Consul Frank W. Mahin, Amsterdam.]

The New Stock Exchange.

Construction of the new special stock exchange (announced in Daily Consular and Trade Reports for Jan. 3 and Dec. 12, 1911) is proceeding. The new edifice will be of four stories, about 150 by 250 feet. Brick and granite of various colors will be used in the walls. The main room will be a great exchange hall, reaching from the

first floor to a glass roof and surrounded by visitors' galleries. Smaller rooms will be provided for post, telegraph, and other offices, a restaurant, assembly hall, etc. The ground floor will have several shop rooms on the streets with storage space in the interior. The building will have two elevators and four stairways and be otherwise equipped with all modern conveniences.

GERMANY.

[From Consul H. J. Dunlap, Cologne.]

New Bridge Over the Rhine.

The city of Cologne has decided to build a new steel bridge over the River Rhine in place of the pontoon bridge which has been in use from time immemorial. It has not yet been determined whether the new bridge shall be built on pillars of stone or whether it shall take the suspension form as in Budapest, Hungary. A commission has returned from Budapest with a favorable impression, but objections are made that the river front will be disarranged by putting in the new construction, both the steel bridges now in existence being built upon stone abutments. The bridge will provide for double street car tracks, general wagon traffic, and foot passengers. Foreign firms can not well compete for the bridge contract, but those interested in the matter should write to the Oberbürgermeister, Koeln a/Rhein. The specifications will be ready shortly.

RUSSIA.

[From Consul General John H. Snodgrass, Moscow; supplementing report from Riga in Daily Consular and Trade Reports for Jan. 13, 1912.]

Improvement and Development of Commercial Seaports.

The Russian Government has decided to make some costly improvements at all its important seaports, and, in line with this general policy, the Minister for Trade and Industry has submitted to the Duma's consideration its primary program. The initial cost is fixed at \$52,330,871, of which \$46,345,412 will be charged to extraordinary expenses and the remaining \$5,985,459 will come under the head of ordinary expenses. The suggested appropriation for each port is given as follows:

Archangel.—\$705,550 is asked, including \$188,490 for deepening harbor, \$25,750 for light signals and buoys, \$180,250 for ice-cutting steamer, \$72,100 for strengthening the Solombalsky coast, and \$238,960 for expropriation of land.

St. Petersburg.—\$6,729,763 is asked, \$215,013 for continuance of building a coal harbor, for enlarging and deepening of harbor for export of timber and grain, and for building wharves in Morskoi Canal; \$6,514,750 for enlarging and improving port of St. Petersburg, to wit: Widening grain and timber harbor and deepening to 28 feet; lengthening left dam of Morskoi Canal to 700 feet; building a pier for export cargoes, the pier to be with massive bank sides; building a pier for timber storehouses; for enlarging the island Volni; filling in the stream Podbatareinaya; and for building a canal 22 feet deep to the River Ekateringofka with a reservoir at mouth of canal.

Revel.—\$607,700 for rebuilding western pier.

Riga.—\$2,672,234 asked: For extending the quay of Muehlgraben by 2,450 feet, \$233,810; extending pier of export harbor by 3,500 feet, \$656,625; improving western Dvina River and rendering tributaries navigable for barges, \$569,075; building a wall along Andreiev Island, \$123,600; building a bank side on Andreiev Island, \$849,750; building a road from second Vigonnaya jetty to Muehlgraben Basin, and a permanent bridge over River Red Dvina, \$108,150; continuing sea wall on Lutsausholm Island, \$84,975; other expenses, \$45,835.

Windau.—\$355,350 for following improvements: Deepening entrance sea canal, \$257,500, and for constructing quays for exports and imports, \$97,850.

Libau.—\$2,358,700 for rebuilding new pier in roadstead to north of present quays; lengthening roadstead quays by 924 feet; building a quay to north of the new pier; building a sea wall (1,715 feet) from end of above quays to Razdelitelny Pier; and deepening entrance canal into port to 31 and 32 feet.

Pernau.—\$61,800 to build quays and dredge harbor to 22 feet.

Narva.—\$272,950 is for deepening sea canal to 24 feet and dredging and widening mouth of river.

Baltic Sea.—It is planned to establish a number of "refuge ports" in this sea, for which \$468,135 is allowed. The refuge ports are as follows: Asseeriv, in Gulf of Finland between Port Kunda and mouth of River Narova; Verder, at entrance into Munsund from Gulf of Riga; port of Pevlov, at mouth of River Sakkey; Oriak, in Gulf of Jaousta, formed by southeastern coasts of island Dago and island Kassar; Tserel, on island Oesel; and bay of Kielkond, on western coast of same island.

Danube River.—\$3,203,815 is required for improving navigation at mouth of Danube, building a canal with locks and a sheltered roadstead in bay of Zebriansk, and improving port of Reni.

Odessa.—\$4,975,415 for constructing a grain harbor.

Eupatoria.—\$1,133,000 for reconstruction of port.

Nikoliev.—\$2,623,925 for improvements: For deepening entrance to 30 feet, \$1,789,625, and for development of mooring blocks, \$834,300.

Kherson.—\$136,475 is asked, \$59,225 for continuing work in building quays, and \$77,250 for other necessary work.

Crimean Peninsula.—For building "refuge ports," \$386,250, \$257,500 for building refuge port in Soudak, \$20,600 in Ak-Mechet, and \$108,150 in Usular.

Anapa.—\$87,550 for extension of 700 feet of present port.

Novorossiask.—\$103,000 for lengthening mooring line.

Tuapsey.—\$174,070 for widening the pier, deepening harbor, etc.

Batum.—\$439,295 for improving harbor.

Caucasus.—\$1,287,500 for building "refuge ports" along Caucasian Black Sea coast, to wit: \$515,000 at Sukhum, \$515,000 at Sochi, and \$257,500 for building wharves at Gelendjik, Gagry, Host, Gudaout, Adler, and Djoubda.

Berdiansk.—\$566,500 for improvements.

Mariupol.—\$6,196,480; for coal-loading machinery, \$824,000; enlarging harbor, \$5,211,285; rebuilding wharves, \$161,195.

Kertch-Enikalsk.—\$1,699,500 for deepening Kertch-Enikalsky Canal; \$231,750 for adjusting basin for loading grain.

Rostov-on-Don.—\$1,123,777 for extension of embankments.

Port of Azov.—\$87,555 for lengthening quay.

Eysk and Temriuk.—\$1,596,500 for widening and deepening port of Eysk, and \$303,593 for port of Temriuk.

Sea of Azov.—\$233,810 for building quays and deepening entrances to harbors of several small loading places on Azov Sea.

Volga River.—\$4,120,000 for improving navigation at mouth of Volga, building a canal 14 feet deep and 280 feet wide from Astrakhan to "natural depth of the sea," from 14 to 16 feet.

Petrovsk.—\$16,738 for protective walls to prevent sand drifts at harbor entrance.

Baku.—\$515,000 for building a quay for general use and for erecting a breakwater.

Krasnovodsk.—\$360,500 for improvements in the port and on the Urja.

Caspian "ports of refuge."—\$206,000 for building such ports in Derbent, at mouths of Rivers Kura, Terek, in Artara, and in other places on Caspian.

Vladivostok.—\$3,038,500 for enlarging the port.

Nikolaiefsk on the Amur.—\$739,025 for deepening sea entrance into that port and \$2,328,701 for dredging machines are required.

It is expected that the above works will be completed in five years. The sum of \$46,345,412 to be charged to extraordinary expenses is divided into five parts, one of which will be apportioned for each year.

TURKEY.

[From the Near East.]

The Boyana Project.

The Ministry of Public Works and the Régie Générale des Chemins de Fer signed the convention for this enterprise on April 2. Besides the preparation of plans for the whole project at a cost not to exceed \$30,000, the company undertakes, for the account of the Government, certain work of urgent necessity on the River Kiri, including the

construction of a barrage and a canal altering the course of the river toward the Lake of Scutari. For this work the company will be paid monthly the actual cost plus 15 per cent for general working expenses in connection with the same.

The Hedjaz Railway.

The construction of the branch line, Afouleh-Naplouse-Jerusalem, of a length of 140 kilometers, has been decided upon, and work is to be started shortly. Another branch of 33 kilometers, from Deraa to Bars Eski Cham, is well in hand.

Road Construction.

M. Loucheur, of the Société des Routes d'Etat, is expected here shortly to sign the convention with the Ministry of Public Works (Constantinople) for a further section of 10,000 kilometers of roads to be constructed.

Electric Tramways Concession.

The Ministry of Public Works has invited tenders for a chain of electric tramways for the Asiatic portion of the city, Scutari, Kadikeui, and their environs. The projected lines are the following: (a) From Scutari to Tchamlidja and Alemdagh; (b) from Scutari to Kadikeui, with a branch line to Haidar Pasha; (c) from Kadikeui to Moda; (d) a branch of the previous line to Fenerbaghtche.

The concession is for a period of 60 years, and the concessionaire must form an Ottoman company. The company will have the option of itself producing the motive power or of purchasing the same from third parties. The surveys are to be completed within a period of two years, and the plans submitted by the company must be accepted or modified by the Ministry of Public Works in a delay not to exceed four months; work to be started in six months from the date of the acceptance of the plans, and to be completed within a period of three years from the same date, with the exception of that portion of the chain between Tchamlidja and Alemdagh, for which a period of 10 years is allowed for completion.

The adjudication bears further on (a) the methods of working and profits; (b) the share of profits to be allowed to the prefecture of the city, after deducting working expenses, interest, and redemption of capital for first outlay and supplementary works; (c) on the rate of interest on capital for first outlay and supplementary works; (d) the participation of concessionaire in the cost of acquiring ground for the widening of streets where the tramway is to pass; (e) on the quantity of rolling stock and the number of runs per diem. Those tendering must furnish a guarantee of \$25,000, a certificate of technical capacity, and produce evidence of the partaking of financial establishments or well-known capitalists in the undertaking. The adjudication closes on June 15.

FOREIGN TRADE IN DENATURED ALCOHOL.

The Bureau of Manufactures has issued a monograph entitled Foreign Trade in Denatured Alcohol that should prove of interest to American manufacturers and consumers of wood alcohol and methylated spirit. The monograph includes consular reports from 24 countries, most of which were written in response to inquiries as to the possibility of increasing the foreign sales of American wood alcohol. The aim has been in each case to indicate the demand for denatured alcohol, the possibility of increasing the demand, and the amount of ordinary alcohol produced. The regulations governing denaturation are given in detail for some countries, including Germany. Copies of the monograph may be secured upon application to the Bureau of Manufactures.

SCOTTISH STEEL PRICES ADVANCED.

[From the London Times.]

The steel makers of Scotland have advanced prices by \$1.22 per ton, making the minimum quotations for ship plates \$37.10, angles \$35.28, and boiler plates \$40.75, all less 5 per cent for Clyde delivery. This follows upon an advance of \$2.43 per ton in ship plates and angles and \$1.82 per ton in boiler plates in the northeast of England, and coincides with advances of from \$1.22 to \$2.43 per ton in Staffordshire iron.

AUSTRALIA'S INDUSTRIAL PROGRESS.

[From Consul General John P. Bray, Sydney.]

Official statistics of Australia's industries for 1910 disclose, on comparison with the corresponding figures for 1909, a satisfactory advance throughout.

Taking the Commonwealth as a whole, the number of factories increased by 625, or 4.7 per cent, while the number of employees rose 20,413, or 7.7 per cent. The amount paid in wages exhibits a larger percentage of increase than does the number of workmen, the figures showing that 13.1 per cent more was paid in wages during 1910 than in the previous year.

Reviewing the progress in each State, the increase in the output of New South Wales was \$32,386,334, or 15.49 per cent; Victoria, \$18,310,785, or 11.44 per cent; South Australia, \$6,115,195, or 12.66 per cent; Western Australia, \$2,554,947, or 13.10 per cent; Queensland, approximately 21 per cent. Tasmanian figures are not available for comparison, the output returns as collected for 1909 being unreliable.

Details by States.

The figures for 1910 are summarized as follows:

	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
Factories.....	4,823	4,873	1,563	1,278	680	605
Employees.....	99,746	102,176	33,944	27,010	14,107	9,848
	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>
Wages paid.....	42,240,136	36,940,530	13,797,221	11,291,714	9,182,573	3,619,835
Fuel used.....	5,759,611	3,106,196	1,064,085	1,524,733	730,511	634,143
Materials used.....	152,683,574	106,634,499	46,057,340	32,538,939	8,796,401	6,720,287
Value added in process of manufacture.....	88,447,451	71,537,240	30,692,309	21,818,678	13,236,949	7,780,797
Output.....	241,132,025	178,171,750	76,743,650	54,356,818	22,033,349	14,501,083
Land and buildings.....	58,848,651	43,799,596	14,803,434	12,872,478	8,140,272	4,962,133
Plant and machinery.....	56,272,093	36,941,030	22,509,182	10,816,999	9,202,906	4,957,858

The proportion which the various items bore in 1910 to the value of the output in each State is shown below:

	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Wages.....	17.52	20.73	17.93	20.77	37.14	24.96	19.77
Fuel.....	2.39	1.74	1.37	2.81	3.32	4.37	2.18
Materials used.....	63.32	59.85	60.01	59.86	39.92	46.35	60.22
Margin for profits and miscellaneous expenses and charges.....	16.77	17.68	20.09	16.56	19.62	24.32	17.83

Data as to Employees.

The preponderance of male over female employees in 1910 appears from the following table, which also gives the average yearly earnings of the factory workers of both sexes:

	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.
Male employees.....	75,419	66,309	27,165	21,864	11,654	8,145	210,556
Female employees.....	24,327	35,967	6,779	5,146	2,453	1,703	76,275
Number of males per 100 females.....	310	184	401	425	475	478	276
Average amount of salaries and wages paid per employee.....	\$441	\$380	\$422	\$439	\$602	\$390	\$423

The low "masculinity" of employees in Victoria is the result of the large number of females working in clothing and textile factories—more especially tailoring and dressmaking establishments, 27,878 females being so engaged in Victoria out of a total of 35,867 females employed. New South Wales had 17,272 females engaged in the clothing and textile fabrics mills, while the total number of females employed in that State was 24,327.

Production in New South Wales.

The following tabular statement is a record of production in the State of New South Wales during 1900 and 1910:

Articles.	1900	1910
Wool, greasy.....pounds..	237,666,000	415,338,080
Tallow.....hundred weight..	444,429	756,100
Butter.....pounds..	41,479,794	76,624,830
Cheese.....do..	3,558,823	5,191,089
Bacon and ham.....do..	10,863,125	12,620,067
Wheat.....bushels..	16,173,771	27,913,547
Corn.....do..	6,292,745	7,594,130
Oats.....do..	593,548	1,702,703
Hay.....tons..	526,280	843,080
Potatoes.....do..	63,253	121,033
Minerals.....value..	\$30,919,699	\$41,092,126
Primary industries.....do..	\$147,442,680	\$228,317,940
Manufactures, net.....do..	\$46,928,160	\$81,616,837
All industries.....do..	\$194,370,840	\$309,936,780

The number of workers in various lines during certain years of the same decade was as follows:

Years.	Rural.	Mining.	Factories.	Railways and trams.
1900.....	122,224	43,745	60,779	14,067
1905.....	128,130	38,932	72,175	17,668
1909.....	142,153	36,405	91,702	25,345
1910.....	146,342	37,413	99,746	26,604

Equipment for Canadian Railways.

Lord Strathcona, high commissioner for Canada, in London, was informed by cablegram from the Minister of the Interior at Ottawa that by July 1 all the Canadian Pacific Railway trains on the Field-Kamloops Division will be drawn by oil-burning engines. This is the heaviest piece of road in the Rockies, and the use of oil will provide an absolute safeguard from forest fires. The Dominion Government has placed the largest order ever given for rolling stock for the Intercolonial Railway. It aggregates \$1,250,000. Nine freight locomotives have been ordered from the Canadian Locomotive Works at Kingston, Ontario, 500 steel box cars from the Nova Scotia Car Co., 2 sleeping and 2 dining cars from the Canada Foundry Co., and 6 first-class coaches from the Preston Car Co. Four entirely new trains are to be placed on the "Ocean Limited" service. This service will cost \$150,000.

Automobile chassis were exported by Germany in January, 1912, to the value of \$1,164,534 (representing 566 in number), against \$694,008 in January, 1911, and \$456,960 worth in January, 1910.

URUGUAYAN LEGISLATIVE MEASURES.

[From American Minister Nicolay A. Grevstad, Montevideo.]

Sales by Weight—Fencing Public Roads.

The Montevideo Association of Bakeries presented a petition to the municipality requesting that the ordinance requiring bread and meat to be sold by weight be declared without effect. The municipal authorities, after consideration, denied the application of the bread makers and issued special instructions to the Bureau of Weights and Measures with reference to carrying into full effect the provision requiring the sale of meat by weight.

There is pending before the Uruguayan Legislature a bill providing for the more effective fencing of public roads as a means of preventing infection of live stock. The measure is a complement to the campaign against scab and has been framed in accordance with the demands of the stock farmers as expressed by the Rural Congress and various rural societies and prominent ranchmen (*estancieros*). Under this bill, which is expected to pass as framed, outside fences must be provided with seven wires instead of six, as now, and the wires must be strung so closely together that sheep can not go through the fence. [A copy of this bill is on file in the Bureau of Manufactures.]

New System of Live-Stock Brands and Marks.

A new system of brands and marks for live stock is to be established in this country. The Government has presented to the General Assembly two bills concerning this matter, which undoubtedly will be adopted without essential modifications.

Under the first [a copy of which is on file in the Bureau of Manufactures] of these two bills the system of progressive numeration is made obligatory. Rules are prescribed for marks and brands. An alphabetic register of live stock is established for the entire Republic, and also official stock books for the stock farmers. The second bill authorizes the Executive to expropriate patented systems of brands of progressive numeration for a consideration not to exceed \$50,000; to invite competition for marks of progressive numeration; and to purchase for the exclusive use of the State the successful system at a remuneration not to exceed \$20,000. An appropriation of \$50,000 is provided for the establishment and publication of departmental alphabetic registers, for printing the stock books for the ranchmen, and for incidental expenses.

The presidential message transmitting these bills states that they have been framed in compliance with the wishes of the Permanent Rural Congress and to meet a pressing need of the stock farmers of the country. The system of progressive numeration, which is now to be made compulsory, already prevails as regards major stock, but as regards minor live stock there is great confusion and uncertainty concerning marks, and to obviate this the Executive proposes to adopt an official system and to invite competition for the best plan of marks and brands.

Size and Place of Brands—Revenue.

Taking note of frequent protests from foreign markets against injury caused by brands on the better part of the hide, a maximum size for the brand has been fixed in the bill, and the parts where the brands may be applied are defined. The formation of alphabetic

departmental registers of marks and brands is intended as an aid to the public authorities and to increase the safety of and the respect for rural property. The farmer's official pass book will serve the double purpose of furnishing a stock census always up to date by means of a numeration of stock made by the farmer himself and of guaranteeing ownership by furnishing exact knowledge of the stock in each establishment.

In order to meet the cost of the expropriations and the competition, it is proposed to levy a uniform fee of 10 pesos (Uruguayan peso is equivalent to \$1.034 United States) for each mark or brand of the official system. It is assumed that 50,000 of these will be required the first two years. This will yield 500,000 pesos, of which the national treasury will receive 400,000 pesos, while 100,000 pesos will be applied for purposes of the departmental registers. The yearly revenue from new marks, transfers, etc., is estimated at 35,000 to 45,000 pesos.

[From Consul Frederic W. Goding, Montevideo.]

Government Encouragement of Immigration.

The Uruguayan immigration law provides that persons needing foreign labor may submit a request in writing to the director of lodgings for immigrants, stating the number and nationality of the laborers desired, class of work, hours, pay, and conditions and form of payment. The communication must also state that a guaranty is given for any sum advanced by the Government for the immigrants' passage, or shall propose a guarantor who shall also sign the petition. If the petition is favorably acted upon by the Ministry of Industries, the proper consulate is asked for immigrants, the navigation company by which they shall be carried being specified.

Out of the sum of \$100,000 which the law appropriates for the encouragement of immigration, \$10,000 is deposited to the order of the Minister of Industries for the payment of passages in advance and expenses of transporting the immigrants. Reimbursement to the State of any moneys so advanced is made by the employer of such immigrant labor in monthly installments of 20 per cent.

POSSIBLE MARKET FOR WATERPROOFING COMPOUNDS.

[From Consul Homer Brett, Maskat, Oman.]

In the Maskat consular district, as throughout the East, all houses are built with flat roofs. These are made of concrete (sometimes entirely of native materials and sometimes of Portland cement), and are surfaced with a plaster which is fairly waterproof but is thin and easily broken. When so broken the roof is no protection whatever against the rain, but rather a disadvantage, as the concrete soaks full of water and continues to drip for days after the rain has ceased.

In Maskat at least there is no house, not even the most expensive, that has a water-tight roof, those designed and built by Europeans being equally as bad in this respect as those constructed by the natives. If the waterproofing compounds advertised in American engineering periodicals will really, as is claimed, render an entire concrete mass impermeable to water, they in all probability would, upon proper efforts being made, meet with a ready sale in this consular district.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

No. 631. Navy Department supplies.—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until May 21, 1912, for the following supplies. Firms interested therein should make application to the Bureau of Supplies and Accounts, giving the schedules desired by number: Schedule 4526, window, door, and ventilator screens; schedule 4527, furnishing and installing storage tank for alcohol. Bids will be received until May 28, 1912, for the following: Schedule 4536, leather belting, mattress binding, hand fire grenades, pump leather, rigging leather, plain ash oars, cotton twine, baled cork wood; schedule 4532, chain bolts, nickel-plated extension hacksaw frames, ditty box hinges and locks, hydraulic jacks, taper reamers, folding platform scales, painters' gasoline torches, flat round steel washers, pipe wrenches, screw wrenches; schedule 4539, terry cloth, steel bolts and nuts, brass nuts, scoop shovels, steam traps; schedule 4531, transformers; schedule 4540, duplex telephone wire, white-oak fender piles, yellow pine; schedule 4534, white ash, cypress, yellow pine; schedule 4537, rod brass, sheet brass, manganese bronze in ingots, monel metal, seamless brass pipe, evaporator tubes; schedule 4535, medium rod rolled bronze, medium flat steel for miscellaneous forgings, medium steel, galvanized sheet steel, lead pipe; schedule 4538, pig iron, round nickel steel, steel or wrought-iron pipe; schedule 4533, paint drier, mineral lubricating grease, chrome green in oil, red lead, white lead in oil, white basic sulphate lead, petrolatum; schedule 4541, green coffee, macaroni, mustard, pickles in kegs, salt. Tenders are invited until June 4, 1912, for the following: Schedule 4530, carpets and rugs; schedule 4528, electric jib cranes; schedule 4529, neckerchiefs, Turkish cotton bath towels.

No. 632. Concrete and brick construction.—Sealed proposals for constructing concrete sidewalk, brick pavement, concrete curbing, and drains at Fort Travis Reservation, Port Bolivar, Galveston, Tex., will be received at the United States Engineer Office, Galveston, Tex., until May 31, 1912. Information on application to Earl I. Brown, Major, Engineers.

No. 633. Columbia dry cells.—Sealed proposals, in triplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until May 10, 1912, for furnishing the Signal Corps with 20,000 Columbia dry cells, in accordance with specification 221-D and drawings 99-7 and 410c-3, or such part thereof as may be required from May 1, 1912, to April 30, 1913, in standard packages; to be ordered from time to time as the necessities of the service may require. (Proposal No. 582.)

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

No. 8751. Cotton cloths, etc.—An American consul in a South American country reports that a business man in his district wishes to act as manufacturers' agent for cotton cloth, flannels, clothing, etc. He is prepared to give bank references, and to satisfy his principals that he can sell goods for them, if prices and terms are right. Interested persons may correspond in English or Spanish, giving terms and prices.

No. 8752. Concession for new electric lines.—A municipal council in a Latin-American city has ordered a commission to present a project for a concession for new electric car lines within the city. The concession will be for the construction of the road and its operation for 75 years, after which the property will pass to the city. Copy of the report, containing further details as furnished by an American consulate, will be mailed to interested firms by the Bureau of Manufactures.

No. 8753. Electric lighting for cities in West Indies.—The American consul at Guadeloupe, French West Indies, has submitted a report on the possibilities for electric-light plants in various cities of the West Indies; also translations of the Government concessions for Guadeloupe, Basse Terre, and Pointe à Pitre. The concessionaires are not able to work some of these and are willing to transfer them under certain conditions. The Bureau of Manufactures will forward the above papers to any firms interested in the propositions.

DAILY CONSULAR AND TRADE REPORTS

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INCREASED DANISH TRADE.

[By Consul General E. D. Winslow, Copenhagen.]

The steady increase which has characterized the foreign trade of Denmark for some years continued during 1911. The value of the goods imported for consumption was \$167,044,400, a gain of \$12,354,800 over 1910 and \$15,142,000 over 1909. The exports of the products and manufactures of the country amounted to \$142,736,800, against \$131,427,200 for 1910 and \$118,938,400 for 1909.

Of the total exports last year, agricultural products accounted for \$127,943,200, while the imports in this line amounted to but \$58,879,600. There was an increase of \$9,674,800 over the record year of 1910 in the value of Danish agricultural products exported.

The weather conditions were remarkably favorable to the crops, and the yields of grain and hay were good; the potatoes and beets were of excellent quality and exceptionally high prices were obtained for most agricultural products. The dry summer, however, shortened the period of grazing, and the farmers were obliged to feed their cattle with artificial feeding stuffs to a much larger extent than in most years. The money market was easier than for 1910 and the shipping trade materially improved.

Imports and Exports.

The following table shows the value of the principal imports into and exports from Denmark during 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
IMPORTS.			IMPORTS—continued.		
Barley, unground.....	\$2,762,000	\$2,224,400	Wheat:		
Coal, coke, etc.....	12,105,828	12,619,048	Unground.....	\$2,780,500	\$3,247,356
Coffee.....	3,738,868	4,824,000	Ground.....	2,705,728	3,051,716
Corn.....	5,011,332	7,763,692	EXPORTS.		
Cotton.....	1,644,448	1,770,944	Bacon.....	30,800,972	32,352,424
Lumber.....	7,014,096	7,437,000	Butter.....	48,432,156	51,665,308
Metals and metal goods.....	14,954,400	16,754,824	Cattle.....	9,029,992	11,089,572
Oats, unground.....	2,385,468	1,799,352	Eggs.....	7,149,168	7,905,464
Oil cakes.....	13,631,820	15,276,196	Hides and skins.....	3,912,000	3,277,640
Petroleum.....	1,287,740	1,365,192	Horses.....	4,744,404	5,478,992
Rye:			Meat, fresh.....	2,910,748	2,485,432
Unground.....	5,200,540	5,182,852			
Ground.....	691,976	581,292			

Of the 1,122,393,951 pounds of oil cakes, valued at \$15,276,196, imported last year, cottonseed cake represented 387,989,595 pounds. The other imports of oil cakes were as follows, in pounds: Sunflower, 328,102,236; soya bean, 154,425,852; hemp seed, 150,932,250; ground nut, 58,428,090; flax seed, 27,763,155; rape seed, 12,975,102; and palm nut, 1,777,671. The imports of oil cakes increased about 196,000,000 pounds over 1910 notwithstanding a considerable larger output in the home product.

Shipments of Butter, Bacon, Eggs, etc.—Sugar and Casein Output.

The quantity of butter shipped last year was 197,045,860 pounds, and the price was about 58 cents per kilo (2.2 pounds). The exports of bacon were larger than in any previous year, amounting to 248,842,220 pounds, but the prices decreased about 12 per cent compared with 1910. The imports of American bacon increased 40 to 50 per cent. The export of eggs, amounting to 35,851,768 dozen, was the largest since 1903, and the prices increased somewhat over the previous year. The increase in the shipments of live cattle over 1910 was about 12,000 head, but there was a decline in the exports of beef of about 8,800,000 pounds. The prices of both cattle and beef increased 10 to 15 per cent. The shipments of horses from Denmark have been increasing during the last three years and there has been a continued advance in their prices.

The output of beet sugar, which has been a prosperous industry in Denmark for a number of years, shows a large gain over 1910, but the statistics are not yet available. The output in 1910 amounted to over 220,500,000 pounds, compared with an average of 136,400,000 pounds for the years 1906–1909. There are eight beet-sugar factories in Denmark, and the establishment of two new factories is under consideration.

Casein is a new article of export from the country, and the production of this commodity, which commenced in the spring of 1910, amounted to 1,102,500 pounds for that year. The output for last year is estimated at 5,500,000 pounds.

Import Trade with the United States.

There was a gain in practically all the principal items of import from the United States last year compared with the previous one. The following table shows the principal articles and the quantity:

Articles.	1910	1911	Articles.	1910	1911
	<i>Pounds.</i>	<i>Pounds.</i>		<i>Pounds.</i>	<i>Pounds.</i>
Corn (maize).....	153,195,021	219,612,665	Sirup.....	4,028,976	3,541,892
Cottonseed cakes.....	196,859,754	322,207,830	Wheat:		
Lard.....	4,693,783	6,870,780	Unground.....	50,990,184	53,620,088
Oleomargarine.....	4,758,610	5,383,871	Ground.....	40,388,685	49,577,000
Petroleum.....	178,215,817	212,379,060			

The American trade in the Kingdom compares favorably with that of its competitors. The market in Denmark is not a large one; but Copenhagen is the clearing house for all of Scandinavia, and about 12,000,000 people buy through the metropolis. There is no favoritism shown by buyers; but the best goods and terms always capture the trade. It is well to have an exclusive agent stationed here, and, if possible, allow him a small salary with commission on sales. When goods are addressed direct to purchaser the bill of lading may be sent to one of the banks with instructions for delivery on payment of purchase price.

The line of goods that can be sold here includes everything that sells in the United States, and the consulate general invites correspondence with all firms desiring to enter this market.

Shipments to the United States and Possessions.

There was an increase of \$861,234 in the value of the articles invoiced through the American consulate general at Copenhagen to the United States compared with 1910. This gain was due principally to the larger shipments of dry and salted calfskins, salted cowhides, wool, and casein. The principal articles exported to the United States and their value for 1910 and 1911 were as follows:

Articles.	1910	1911	Articles.	1910	1911
Books, Danish.....	\$13,403	\$19,541	Liquors.....	\$8,075	\$5,496
Butter.....	729	2,761	Machinery.....	4,161	4,842
Cabbages.....	10,509		Manes, horse.....	6,915	
Casein.....	12,028	72,476	Marble.....	12,176	2,334
Feathers.....	6,121	396	Porcelain.....	17,144	13,930
Fertilizers.....	10,777	1,499	Rags.....	33,071	17,248
Films.....	66,099	73,888	Rennet.....	105,279	98,309
Flint pebbles.....	97,456	61,376	Rope, old manila.....	11,285	9,764
Fusel oil.....	19,511	10,364	Rubber, old.....	36,402	14,700
Glycerin, crude.....		4,228	Sausages.....	4,506	7,617
Hides and skins:			Sausage skins.....	29,517	11,951
Cowhides, salted.....	106,796	367,809	Seed.....	65,312	109,621
Calfskins—			Wool, Icelandic.....	178,049	246,263
Dry.....	142,995	177,444	All other articles.....	22,601	29,488
Salted.....	457,777	993,747			
Hosiery.....	23,735	29,689	Total.....	1,532,766	2,394,000
Household effects.....	10,337	7,340			

The shipments to Porto Rico amounted to \$93,168, a gain of \$5,904 over 1910. Of the total last year, butter represented \$81,692, beer \$7,349, and potatoes \$2,407. Of the total exports to the Philippine Islands, amounting to \$51,099, in 1911, \$50,838 represented butter.

Shipping Service—Emigration—Duties and Internal Revenue.

A new steamship line to South America and with San Francisco as its terminal has been established by the East Asiatic Co. of Copenhagen, in anticipation of the increased trade after the opening of the Panama Canal. The Scandinavian-American Line, which has a regular service with its four large steamers of about 10,000 tons each to New York, is building another steamer in order to keep up a weekly connection between New York and Copenhagen.

The total number of emigration tickets viséed by the Copenhagen police department during 1911 was 14,463, against 15,836 for 1910, of which 7,933 were for Danish, 2,637 for Swedish, and 3,893 for other nationalities. Twelve thousand three hundred and thirty-seven (of which 7,249 were men, 3,685 women, and 1,403 children) emigrated to the United States, 1,146 to Canada, 690 to South America, 135 to Africa and Asia, and 155 to Australia.

The amount of customs duties collected in Denmark last year was \$8,500,000, a gain of \$100,000 over 1910. Receipts from the internal revenue were \$4,450,000, as follows: From sugar, \$1,200,000; distillation of spirits, \$1,150,000; beer, \$1,700,000; and from other sources, \$400,000. The expenses connected with the collection of these taxes were \$500,000.

The Free Port of Copenhagen—Street Railways.

The commerce of the Copenhagen free port is increasing each year, due to its up-to-date loading and discharging facilities, its low rates

of dues and fees, and the fact that the territory of the free port is outside the customs boundaries so that the goods can be handled and warehoused without any interference on the part of the customs authorities. The industries in the free port enjoy the advantage of receiving the necessary machinery, raw materials, coal, etc., free of duty, and the customs officials have no supervision of the goods manufactured there until they pass the customs boundaries.

The principal industries at present in the free port are the manufacture of coffee, paints and colors, rifles, rennet extracts, films, polishes, chocolates, liqueurs, casein, chemicals, furs and garments, feather cleansing, cooper's works, silver plating, and the grinding of grain and feed stuffs.

The Copenhagen street railways, heretofore operated by a private corporation, were taken over by the municipality last August.

Fisheries—Scandinavian Banks in London and Paris.

The output of the Danish fisheries, which at one time was of considerable importance, has steadily declined, and large quantities of dried and salted fish are annually imported.

A Scandinavian bank, under the name of "Banque des Pays du Nord," has been established in Paris, and another, under the name "The British Bank of Northern Commerce (Ltd.)," in London, and these institutions have connections in Denmark, Sweden, Norway, France, and England. The capital of the Paris bank is 25,000,000 francs (\$4,825,000) fully paid, and that of the London bank £2,000,000 (\$9,733,000), of which 50 per cent has been paid in.

Regulations Regarding Sale of Butter.

A new law relative to the trade in butter and foreign agricultural products, etc., passed last year, provides that butter offered for sale or for export shall not contain more than 16 per cent of water. Butter containing 16 to 20 per cent of water shall only be offered for sale when it is distinctly marked "water butter," and butter containing more than 20 per cent of water is not allowed to be sold.

It appears that the requirements of England caused the enactment of this law in Denmark, as England now requires that all butter offered for sale in the English market shall not be allowed to contain more than 16 per cent of water.

Harbor Improvements in the Danish West Indies.

A syndicate consisting of five members [whose names are on file in the Bureau of Manufactures] has applied to the Danish Rigsdag for a concession covering a period of 99 years with a view to making extensive harbor improvements at St. Thomas, Danish West Indies. It is stated that the harbor of St. Thomas has a splendid natural position and is easy of navigation, even in rough weather. It is considered important that the port be enlarged and equipped with modern loading and discharging facilities so as to take advantage of the opening of the Panama Canal, where the largest steamers can go in and have their freight transferred into smaller vessels or from the smaller vessels into the larger ones in the trade to and from Central and South America.

The cost of excavating, filling in, construction of the harbor, and repairing of dock will amount to about \$5,360,000. The syndicate also applies for the sole rights of building tanks there for oil fuel,

electric-light and power plants, cold storages, water-supply works, railroads, lighthouses, and wireless telegraph stations.

Improvements on the South Coast of Iceland.

A French syndicate with a capital of 600,000 francs (\$115,800), and financed by the Banque Francaise pour la Commerce et l'Industrie of Paris, has purchased property on the south coast of Iceland for the purpose of building a new harbor there. The syndicate has also secured control of large waterfalls which are situated a few miles inland, and engineers have investigated the possibility of utilizing this power, which is estimated at about 200,000 horsepower, to generate electricity for operating factories which will be built near the harbor. One of these industries will be the reclaiming of nitrogen from the air.

Iceland suffered from a drought last spring, causing a shortage in the hay crop. The output of potatoes and beet roots, however, was satisfactory.

NOTES FROM FORMOSA.

[From Consul Samuel C. Reat, Tamsui.]

Increased Trade for 1911—Camphor Refining.

The total trade of Formosa for 1911 amounted to \$58,988,865, an increase over 1910 of nearly \$4,000,000. The trade with Japan was \$42,623,026 and with foreign countries \$16,260,328. America gains in the exports to Formosa over 1910, and the principal increase is in machinery.

For the last few years the Camphor Monopoly Bureau has shipped all crude camphor to private refineries in Japan. Now it will resume camphor refining at the Monopoly Bureau in Taihoku. The experimental refining that has been carried on for several months has proved much more successful than the doubtful process attempted several years ago. New evaporators and other machinery are to be installed soon in order to increase the limited output. The amount of camphor refined since last September was 1,000,000 pounds, but by the contemplated improvements the Monopoly Bureau estimates the production for the fiscal year, March, 1912, to March, 1913, at 5,000,000 pounds.

Green Tea Enterprise—Sericulture.

A Japanese tea merchant will grow green tea in Formosa. He has engaged two experts from Uji, Japan, where green tea is largely grown, and has erected a factory in Shinko-sho, Koroton, Taichu. New tea-manufacturing machines have been imported from Japan, and the factory will begin soon on a small scale. The total production this year will probably be 50,000 pounds. As the annual production of Formosa Oolong tea is between 22,000,000 and 25,000,000 pounds, the green-tea production will scarcely be noticed.

Sericulture in Formosa has been carried on for some time by the Formosan Government with such encouraging results that the Taiwan Yozan Shorei Kai (Formosa Silk Worm Culture Encouraging Association) is being organized by leading industrial men of Japan. The company is purchasing from the Government 4,800 acres near Kagi for mulberry cultivation, and 250 farmers will be brought down from Japan. It will erect a silk factory in the capital city of Taihoku.

FOREIGN MERCANTILE EXPOSITIONS.

[From Consul Maddin Summers, Belgrade, Servia.]

Traveling Display of Hungarian Commercial Museum.

At the invitation of the directors of the Royal Hungarian Commercial Museum, of Budapest, I attended the official opening on April 16 of an exhibition of arts and industries in Belgrade. The entire diplomatic and consular corps was present, as also many men prominent in banking and commercial centers.

The rooms of a local club had been rented for the purpose and the display was large and interesting. After remaining here a short time the exhibition will be removed to Sofia, Bulgaria.

The articles exhibited embraced agricultural machinery, all sorts of ceramic and silver ware, pumps, rifles and military munitions, wines, kitchen utensils, cotton and linen goods, etc., all of Hungarian make. Regret was expressed by some of the local commercial firms that the catalogues of the articles on exhibition were written in Hungarian only. This language, as also English, French, and Spanish are little understood here, German being the one best known and generally spoken.

The general opinion here is that a similar exposition of American products would result in great good. The population, commercial importance, and consequent needs of the people are growing at a rapid rate, not only here but in the other Balkan States. On every side one sees a market for agricultural machinery, building materials, sanitary articles, office furniture, and many other manufactured articles. It is useless, however, to try to extend the trade by writing the merchants in English and sending them catalogues in the same language. This is especially true in the case of articles which are as yet not well known in the country, such as certain makes of agricultural machinery, cash registers, typewriters, etc.

[From Consul Thomas E. Heenan, Warsaw.]

International Sporting Exposition in Russia.

The Warsaw Society of Sports has secured a postponement of time for holding the International Sporting and Industrial Exposition in Warsaw, which was to have been held for two months beginning May 7 [announcement of which appeared in Daily Consular and Trade Reports for Mar. 13, 1912]. In a communication to this consulate Stanislas Lilpop, president, and Felix Laskowski, director, of the exhibition, state:

As we have now obtained an extension of time for holding this exhibition, we would ask you, as far as you are able to do so and consider it fruitful, to take the necessary steps to interest American industries in our exhibition, regarding which we are ready to supply you with all information.

At the same time we take this opportunity to inform you that the participation of American industries in our exhibition would be a great honor for us and would possess an important meaning for our own industry.

Firms interested should send a supply of illustrated catalogues of their manufactures to the committee, addressing them as follows: The Secretary, Sports Exhibition, Kolo Sportowe, Krolewska No. 10, Warsaw, Russia. An obstacle to getting American manufactured articles into the exposition is that no American firm in the sporting line has an agent here, without which not much could be done, and time hardly permits of arrangements being made for such.

Sport in Russia, with the exception of shooting, skating, cycling, and rowing, is entirely in its infancy, and it is only during the last year or two that schoolboys have taken to such games as football, running, hockey, etc. The people on the whole are slow in taking to these pastimes, and much propaganda is necessary to interest them, but as time goes on there is no doubt that a large field will open for introducing various games, for which naturally the necessary accessories will be required. It was with the object of making people more familiar with sports and pastimes that the forthcoming exposition was proposed. A circular (in French) of the exposition is forwarded [and will be loaned on application to the Bureau of Manufactures].

[From Consul General John L. Griffiths, London.]

September Exhibitions in British Capital.

Two practical exhibitions to be held in London are:

The Confectioners', Bakers', and Allied Trades' Twentieth Annual International Exhibition and Market, September 7 to 14, 1912, inclusive.

The Grocery, Provision, Oil, and Italian Warehouse and Allied Trades' Twentieth Annual International Exhibition and Market, September 21 to 26, 1912, inclusive.

Prospectuses of these are forwarded [and may be had from the Bureau of Manufactures at Washington]. In his letter transmitting the prospectuses the manager calls attention to the fact that these exhibitions are practically huge markets, the chief object of which is to bring the buyer and the producer into contact with each other.

[From London Chamber of Commerce Journal.]

Modern Business and Advertising Exhibition at Manchester.

A Modern Business and Advertising Exhibition is announced to be held at the City Exhibition Hall, Manchester, from October 29 to November 9 next. Particulars may be obtained from the offices of the exhibition, 312 Deansgate, Manchester, England.

Jewelers' Exhibition in London.

A Jewelers', Silversmiths', and Allied Trades' Exhibition will be held at the Royal Agricultural Hall, London, N., from July 6 to 13 next. Particulars may be obtained from the International Trades Exhibitions (Ltd.), Broad Street House, London, E. C.

[Report of British commercial attaché for Italy to Board of Trade at London.]

Showrooms for British Goods at Genoa.

The Harbor Board of Genoa proposes to open showrooms for the exhibition of British and other foreign goods suitable for the Italian market. For this purpose two large buildings have been set aside, which, by arrangement with the customs authorities, will be treated as bonded warehouses (porto franco). One of these buildings is already finished. Both are in a central position in the port, are built of concrete, and consist of ground floor and two floors above. The president of the board has offered the free use for 10 years of the upper floor of the second building, which will measure about 40 by 24 meters (equal to about 10,000 square feet), to the British Chamber of Commerce for Italy. This floor will be adapted and fitted with steam radiators for heating and with electric-light appliances, at the cost of the "Consorzio," on condition that the British Chamber of Commerce makes its headquarters in the premises and assists the "Consorzio" in carrying out the scheme. The chamber has accepted this offer, and will in due course organize temporary shows of different classes of British goods likely to attract Italian importers. Entrance to the rooms will be free, and firms invited to exhibit goods will have no expenses beyond the carriage of goods to Genoa, and a nom-

inal charge for the cleaning of show cases and attendance. The chamber will arrange, free of any charge, to take delivery of the goods on arrival, c. i. f. Genoa, unpack and set up in show cases, insure while in the above premises against all risks of fire, and provide an attendant to furnish such information about the goods as may be supplied to the chamber by the exhibitors. The chamber will further undertake that the show-rooms shall be properly advertised in the Italian press, and will send to the Board of Trade and to the British and colonial trade journals periodical reports regarding the classes of goods most likely to interest Italian importers. It must be clearly understood that the proposal is not to establish sample rooms, but special temporary shows of goods required on the Italian market, e. g., sanitary appliances, requirements for chemical industries, boots and leather goods, china and glass ware, etc.

Sample Exhibition at Smyrna.

The British Chamber of Commerce in Smyrna, Turkey, has decided to take more active steps to develop its project for a permanent sample exhibition of British goods in Smyrna, and has set aside a sum for sending a delegate to the United Kingdom this summer to interview firms interested in the Smyrna market. A selling agency will be combined with the exhibition.

Exhibition of Agricultural Machinery at Rostov-on-Don.

The Imperial Don-Kuban-Ter Agricultural Society announces the establishment at Rostov, Russia, of an exhibition of agricultural machinery and implements, to last nearly a year, excluding the period from September 14 to October 28, when the usual annual exhibition is held, for which special rules are laid down. The cost of space at the former exhibition will be 5 rubles per square arshin (about 50 cents per square foot). Applications for space should be addressed to the Council of the Imperial Don-Kuban-Ter Agricultural Society, Taganrog Prospect Vystavka, Rostov-on-Don.

[From Consul General Thomas Sammons, Yokohama, Japan.]

Exhibition under Auspices of Municipal Assembly at Yokohama.

Japanese business men and manufacturers of Yokohama are preparing to hold an exhibition, probably from April 1 to June 30, 1913. This undertaking will be under the auspices of the Yokohama Municipal Assembly and the various articles manufactured in or exported from this part of Japan will be placed on exhibition.

[From Consul Samuel C. Reat, Tamsul.]

Industrial Exhibition Planned in Formosa.

Tentative plans are being formed for holding an industrial exhibition in Formosa in May, 1913. The Crown Prince will come down from Japan to open the exposition.

Exhibition of American Plows.

The Taihoku Seito Kaisha, which celebrated the completion of its American-built sugar factory December 17, 1911, has just given an entertainment for the benefit of its farmers. The practical features of the occasion were demonstration in soil preparation and fertilization, exhibition of specimens of cultivated cane, and display of American plows and cultivators. If such exhibitions were followed by an aggressive sale campaign by American exporters of agricultural implements, American plows would soon displace the crude plow so familiar throughout the Orient.

[From London Commercial Intelligence.]

International Exhibition Project in Australia.

A. E. Morgens, a well-known mine proprietor of Perth, Western Australia, is the chairman of a committee which has been formed in that city to promote the holding of an international exhibition at Perth in 1915, when the Kalgoorlie & Port Augusta Railway is expected to be complete. Meantime, the details of the Victorian Government's project for an Empire Exhibition, to be held in Australia in 1913 or 1914, are being considered by the Commonwealth and the various State governments, and the Victorian treasurer has expressed a hope that the Government of Western Australia will not commit itself to supporting the local project until the Empire Exhibition scheme has been dealt with.

WEALTH OF NATIONS.

[From M. Neymarck's report.]

At present Great Britain, Germany, and France hold more than 330 milliard francs (franc=19.3 cents; hence this sum=\$63,690,000,000) of paper securities out of the 570 to 600 milliards (\$110,010,000,000 to \$115,800,000,000) which belong to the various nations inhabiting the various countries of the globe. These 330 milliards taken at 4 per cent bring them in a minimum interest of 13,200,000,000 francs (\$2,509,000,000). On their markets more than 600 milliards are negotiable of the 815 milliards of the negotiable securities quoted in the different markets of the world.

The following table shows the holdings of the Stock Exchange securities held by the peoples of the leading countries of the world:

Countries.	End of 1908.	End of 1910.
United Kingdom.....	\$25,080,000,000 to \$26,055,000,000	\$27,020,000,000 to \$27,406,000,000
United States.....	22,195,000,000 to 23,100,000,000	25,080,000,000 to 25,476,000,000
France.....	19,879,000,000 to 20,265,000,000	20,458,000,000 to 21,230,000,000
Germany.....	15,440,000,000 to 16,405,000,000	17,370,000,000 to 18,335,000,000
Russia.....	4,825,000,000 to 5,211,000,000	5,597,000,000 to 5,983,000,000
Austria-Hungary.....	4,053,000,000 to 4,246,000,000	4,439,000,000 to 4,632,000,000
Italy.....	1,930,000,000 to 2,316,000,000	2,509,000,000 to 2,702,000,000
Japan.....	1,158,000,000 to 1,351,000,000	1,737,000,000 to 2,316,000,000
Other countries.....	6,389,000,000 to 7,334,000,000	6,755,000,000 to 7,720,000,000
Total.....	100,839,000,000 to 106,343,000,000	110,975,000,000 to 115,800,000,000

Taking the highest figures, the wealth of the world expressed in Stock Exchange securities alone would thus amount to the huge figure of \$115,800,000,000, in which the share of the United States would be \$25,476,000,000.

The Archiv für Eisenbahnwesen has latest reliable statistics concerning the development of the railway systems of the world. This German statistical organ sets down the lengths of railway line as follows in kilometers (kilometer=0.62 mile) for the end of the year 1909: Europe, 329,691; America, 513,824; Asia, 99,436; Africa, 33,481; Australia, 30,316; total, 1,006,748 kilometers. The average cost of construction per kilometer of line it sets down as \$76,718 for Europe and \$41,785 in other parts of the world. On this basis the European railways at the end of 1909 would have cost \$25,293,000,000—a little less than the assigned value of American-held paper securities; while the railways in the other parts of the world would have cost \$28,291,000,000—a little more. Together, the cost price of all the railway lines in the world at the end of 1909 would thus work out at \$53,551,000,000.

Cotton Growing in Chihuahua.

Consul Marion Letcher, of Chihuahua City, states that not much cotton is produced in the Mexican State of Chihuahua. The latest statistics—those for 1908—show only 499,400 pounds, of which 455,400 pounds were produced in the district of Camargo, of which Santa Rosalia is the principal city. However, the consul is informed that with the completion of the irrigation dam on the Conchos River at La Boquilla, a few miles from Santa Rosalia, cotton planting in the irrigated territory will be begun on a considerable scale.

HONGKONG SHIPPING RECORD.

[From Consul General George E. Anderson.]

Entrances and clearances in the port of Hongkong decreased in 1911, not only in number but also in tonnage, when compared with 1910, but exceeded in tonnage the record of 1909 and previous years. The total entrances and clearances in the year were 543,570 vessels with an aggregate tonnage of 36,179,152, in contrast to 547,164 vessels of 36,534,361 tons in 1910. Of the totals given, 44,978 vessels with a tonnage of 23,063,103 were engaged in foreign trade as compared with 40,714 vessels of 23,160,256 tons the year before.

Of the vessels engaged in foreign trade in 1911 above noted, 32.9 per cent were British ocean-going ships, 34.3 per cent foreign ocean-going ships, 17.8 per cent British river steamers, 3.2 per cent foreign river steamers, 0.6 per cent launches (under 60 tons), and 11.2 per cent trading junks. The proportionate share in 1910 was: British ocean-going ships, 35 per cent; foreign ocean-going ships, 35 per cent; British river steamers, 17.3 per cent; foreign river steamers, 3 per cent; launches, 0.6 per cent; and junks, 9.1 per cent. In other words, the chief loss for the year was in British shipping.

The United States had a larger share of the shipping entered and cleared in Hongkong in 1911 than it has had for years, but this was due to the retrogression of entrances from other countries, to the stability of American shipping, and to no development of American shipping other than the addition of two vessels of British construction to the American list under Philippine ownership.

Over-Sea Shipping.

The proportionate share of the various nations in Hongkong's over-sea shipping concerns foreign interests most, and this appears from the following table of entrances of individual ocean vessels of European type of construction by nations for the past two years:

Flag.	Vessels.		Number of times entered.		Total tonnage.	
	1910	1911	1910	1911	1910	1911
British.....	365	348	2,131	1,958	4,059,220	3,798,156
German.....	113	111	722	657	1,206,757	1,133,786
Japanese.....	102	108	508	509	1,341,221	1,354,362
Norwegian.....	34	36	223	210	236,334	221,039
Austrian.....	7	6	24	24	95,062	96,380
Chinese.....	22	20	250	192	314,879	241,362
Danish.....	6	8	20	20	33,165	45,923
Dutch.....	16	16	108	130	214,737	235,881
French.....	35	27	144	152	262,670	242,469
Italian.....	3	2	13	12	34,496	31,188
Portuguese.....	3	4	66	79	29,478	32,842
Russian.....	7	11	10	20	28,803	53,080
Swedish.....	5	6	27	14	45,398	25,778
American.....	15	19	37	72	210,466	243,782
No flag.....	1	.....	1	.....	299	.....
Total.....	734	720	4,284	4,049	8,112,985	7,756,033

It will be noted that the loss of business in British shipping was quite material. The loss in Chinese shipping reflects the revolutionary troubles rather than any actual change in trade, while the decline in German, Norwegian, French, Italian, and Swedish services can be attributed to the general commercial depression. The increase in the Austrian, Dutch, and Russian services represents special efforts

on the part of these respective countries toward developing their trade in the Far East.

Satisfactory State of Trade:

While the close of the year found shipping dull, in harmony with prevailing conditions of business, and while there has been a reduction in the tonnage, the general state of the shipping trade of the port, particularly coastwise, was much improved, and local companies paid dividends the past year which have experienced losses on their operations for several years past. The trans-Pacific lines and the lines to Europe also showed improvement. As a rule, all companies but the American are making fair returns on their investments and are developing their services rapidly in all directions—results in which Government aid of one sort or another has an important if not a controlling part.

[Previous reports from Consul General Anderson on the shipping situation of the Far East have appeared in Daily Consular and Trade Reports on Dec. 5, 1910, Mar. 15, May 15, June 24, Aug. 12, and Oct. 28, 1911, and Apr. 2, 1912.]

ARGENTINE TRADE NOTES.

[From Consul General R. M. Bartleman, Buenos Aires; monetary figures in American currency.]

Cold-Storage Profits—Cotton Growing.

The La Plata Cold-Storage Co. shows profits for the calendar year 1911 of \$636,687.

The Argentine consul at Barcelona, Spain, reports the formation of a \$3,860,000 company for growing cotton in Argentina.

Grain Crops—Railway Maps.

The official final estimates of the maize (corn) crop show 8,455,910 acres sown, from which 7,515,000 metric tons are expected. Of this 5,000,000 tons will be available for export, which at present prices would bring about \$175,000,000. The second estimate for wheat is 4,610,000 metric tons, for oats 877,300 tons, and for linseed 595,000 tons. [The first estimate appeared in Daily Consular and Trade Reports for Mar. 21.]

Argentina has 3,330 miles of State-owned and 16,300 miles of private-owned railways. Maps are forwarded of the Central Cordoba Railway and of the Buenos Aires-Pacific Railway; these show the lines working and those under construction or for which concessions have been granted. [The maps have been filed for public inspection at the Bureau of Manufactures in Washington.]

Billion Dollars in Exports of Manufactures.

The estimate that a billion dollars' worth of manufactures will be exported in the current fiscal year, made by the Bureau of Statistics, Department of Commerce and Labor, seems likely to be justified. The official figures show for the nine months ending with March 730 million dollars' worth of manufactures exported, these figures being 74 million dollars in excess of those for the corresponding period of the preceding year; and as the exports of manufactures in the year ending June 30, 1911, were valued at 907 million dollars, the figures at hand seem to clearly indicate that the total for the current year will pass the billion dollar line.

SILTING IN HONGKONG HARBOR.

[From Consul General George E. Anderson.]

The matter of deepening some portions of the harbor of Hongkong is receiving serious attention. The topic has been discussed during the past year, and at the annual meeting of the Hongkong General Chamber of Commerce its executive committee reported upon the subject, expressing the opinion that while the matter did not require action at the present time there was need of watching the situation.

Subject One of Interest to United States.

The subject is one of particular interest to the United States, for the deep-draft vessels now visiting Hongkong are almost entirely American. There is still a large area with plenty of water for the largest craft, but the enormous quantity of shipping in the harbor practically all the time and the continual activity of all lines render it necessary that present limits of deep water shall be maintained if not extended.

The larger ships generally anchor at the north of the harbor in the direction of the Pearl River entrances; the buoys of the Pacific Mail Co., the Great Northern Steamship Co. (the two American lines), and of the Toyo Kisen Kaisha, with its vessels in the American service, are located in that section. For several years silt from the Pearl River has been coming into this portion of the harbor in increasing amounts. The moorings of the three companies named have been moved several times, but their larger ships still find the water rather shallow at times for putting about, and it is only occasionally that they can leave port by the northern or Green Island Pass. When the Great Northern liner *Minnesota* arrived, in January, with its record-breaking cargo it was compelled to anchor at the south end of the harbor near what is known as Lai-yee-mun entrance until a portion of its freight had been unloaded. Under the circumstances, therefore, the matter is a pressing one; and with the probable increase in tonnage in this part of the world which will follow the opening of the Panama Canal the issue will not be postponed much longer.

No Port Works or Public Docks.

It is a rather peculiar fact that while Hongkong is one of the great ports of the world in tonnage and activity, in no harbor with anything like equal shipping is there less artificial aid to navigation. There are no public docks or warehouses, the only wharves being owned by a private company in connection with privately owned warehouses and furnishing berths for four vessels. It is a splendid natural harbor, and until the silting now noted was felt, there seemed to be no occasion for port works. With the present danger and with the increasing force of the movement among the Chinese to establish a port at Whampoa or some other locality in the Pearl River it seems quite likely that a change in Hongkong's time-honored policy of favoring shipping by low harbor dues but offering no special harbor facilities will of necessity be changed.

Germany's butter and lard purchases last year were 122,088,903 and 212,443,000 pounds, respectively, against 91,331,000 and 128,703,000 pounds, respectively, in 1910.

OCEAN TRANSPORTATION.

[From Consul General W. Henry Robertson, Callao, Peru.]

Additional Callao and Panama Steamship Connections.

From May 23 the large steamers of the Pacific Steam Navigation Co., now plying between Liverpool and Callao fortnightly, will continue their journey from this port to Panama with passengers, mails, and cargo. From Panama they will make the return journey to Liverpool via Callao, Valparaiso, and the Straits of Magellan. In order to compensate for the additional two weeks thus required for the extended itinerary from Liverpool to Panama and return, the company expects to soon add to its fleet its new 18-knot 17,500-ton vessels. These ships, as well as the present ones of the same line, will be larger than any others now running to Panama from this coast.

[From Consul General R. M. Bartleman, Buenos Aires.]

New River Plate Steamship Line.

It is stated that the Messageries Maritimes Co., not having obtained from the French Government the desired subsidy, has decided to suspend the service of its line to the River Plate. To offset any inconveniences caused by this change, the Générale Transatlantique, Société Générale de Transports Maritimes, and Chargeurs Réunis will undertake to work the line on their own account. Six steamers well fitted for all classes of passengers will sail under the French flag in the name of the Compagnie Sudaméricaine de Navigation.

New Steamer for the South American Service.

The announcement is made that the Hamburg-American Line has decided to place on the South American route the *Blucher*, a vessel of 12,500 tons, dimensions 525 by 62 feet, speed 17 knots per hour, which enables it to make the voyage from Buenos Aires to Lisbon in 14 days. As regards speed, size, and shortened trips, it will be one of the finest boats that comes to the River Plate. This steamer sails from Hamburg on June 25 next and will make its first return journey from Buenos Aires on July 26. With the *Blucher* the Hamburg-American Line will have eight steamers doing a regular service every eight days at this port.

[From Consul P. Emerson Taylor, Stavanger, Norway.]

New Copenhagen and Stettin Steamship Connection.

The United Steamship Co., which operates the Scandinavian-American Line, has placed two new steamships on the route from western Norway, including Stavanger, to Copenhagen and Stettin. The first ship, the *Bergenhus*, began its sailings early in April, the other starting the last of April.

Both ships are of 1,050 tons, with a speed of 10½ knots. They are modern in construction, with accommodations for 26 first-class passengers, besides second-class and steerage accommodations. The sailings are weekly from Stavanger to Copenhagen and Stettin. A weekly service was formerly maintained with practically no passenger accommodations. The new boats are a great advantage for both passenger and freight traffic.

GOVERNMENT PLANS IN INDIA.

[From Consul General William H. Michael, Calcutta.]

The newspapers of Calcutta give considerable space to the last speech of the Viceroy of India before the legislative council here, in which the Viceroy, after reviewing the political and economical history of India for the last 12 years, declared the session closed. In reviewing the economic situation the Viceroy said that he saw in the budget a gratifying picture of India's economic strength.

Preparations for Building Delhi.

The Viceroy then took up the question of the transfer of the capital of India to Delhi and the preparations for rebuilding that city. He said he realized fully the heavy responsibility entailed in the creation of a new imperial city that shall be worthy of the Empire and which shall meet the requirements of a great capital with careful, but not too parsimonious, supervision of the expenditure required to achieve a really satisfactory result. Arrangements have been made by the Viceroy for employing a sanitary engineer, a town planner, an architect, and a landscape gardener to draw up plans for the new city. When acceptable plans have been prepared, architects will be called in to provide suitable designs and estimates for the new Government buildings.

The cost of building the city is estimated by the Government at \$20,000,000. This is considered entirely too low by some critics, who estimate the cost at \$50,000,000 to \$70,000,000, but the Viceroy thinks that a little thought as to what land, Government buildings, roads, drainage, water supply, etc., will at the outset be required for the new city would convince any unbiased person that the cost will approximate far more nearly the Government estimate. He said that he had seen in Delhi what appeared to him a suitable site, had made inquiry into the cost of acquiring a space of 30 square miles embracing this area, and had found that it would cost approximately \$1,000,000 to \$1,166,000. He said that it was a well-known fact that land was very cheap in Delhi and that lime, bricks, and splendid stone, the same as that used by the Mogul Emperors, are to be found on the spot, while the Mekrana marble quarries are only 200 miles distant, on a direct line of railway. These facts, he thinks, naturally conduce to reduce expenditure.

"The Government has, of course, no intention," he says, "of building private residences, shops, business premises, etc. On the other hand, it hopes to obtain a good return for land sold to private individuals on reasonable terms for building leases."

In concluding his speech the Viceroy said it would take some years before the new city could be completed, but that in the meantime arrangements were being made for the temporary accommodation of the Government of India at Delhi during the next cold weather and for the meeting there of the legislative council.

Consul H. A. Conant, of Windsor, reports that a Detroit concern has organized a \$150,000 branch Canadian enterprise and will build a factory at Walkerville, Ontario, for making automobile bodies of aluminum, steel, and wood. It will be in operation by July 15, turning out upward of 100 bodies daily.

CUBAN NEWS NOTES.

[From the Cuba Review.]

Railroad to Bay of Nuevitas.—The Cuban Central Railway plans to construct a standard-gauge road from Kilometer 4 on the line from Caibarien to Placetas, to the Pinta del Pastelillo in the Bay of Nuevitas.

More money required for roads.—According to President Gomez's message, there has been spent between November, 1911, and March, 1912, \$318,619 in repairs and other work on 1,702 kilometers of roads and its complementary buildings. He asks Congress to vote more money, and thinks \$850 per kilometer sufficient.

The coast to coast railroad from Guantanamo to Baracoa, which opens up to sugar planting a new district in Oriente Province, is soon to be inaugurated according to Sr. José Marimon, head of the company organized for the construction of this road, which will open up a rich section now practically inaccessible, as the region is mountainous.

Sugar mill.—Deeds have been signed in Habana conveying 67,000 acres in Oriente Province, municipality of Victoria de las Tunas, to unnamed buyers, who will build a sugar mill to be called the Manati. Its initial capacity will be 150,000 bags, though this will be increased to 300,000 bags. Attention is especially directed to the fact that the new mill will be capitalized with Cuban money.

Customs collections throughout Cuba in 1911 aggregated \$25,972,350, the amounts received at the various ports being as follows: Habana, \$18,380,393; Matanzas, \$859,749; Cardenas, \$519,286; Sagua, \$520,637; Caibarien, \$601,797; Nuevitas, \$209,271; Gibara, \$140,985; Banes, \$68,537; Baracoa, \$6,345; Guantanamo, \$293,547; Santiago, \$1,580,948; Manzanillo, \$480,090; Santa Cruz, \$24,243; Tunas, \$2,054; Trinidad, \$1,504; Cienfuegos, \$1,500,082; Batabano, \$2,942; Nueva Gerona (Isle of Pines), \$14,779; Puerto Padre, \$263,371; Nipe, \$495,648; Jucaro, \$6,142.

Motor boats.—A New Jersey motor construction company has shipped to Santa Cruz, Cuba, a motor boat 30 feet long and 8 feet beam, which will tow lighters carrying sugar during the harvesting season and rafts of mahogany at other times. Much of this trip is in the exposed waters of the Gulf of Guacarmabo, and as the boat will also be used in carrying light freight and passengers from Manzanillo and Santa Cruz and return, power, seaworthiness, and speed combined are demanded. Where there are shallow harbors and freight and passengers have to be lightered to the shore, a reliable fast little motor boat will be found indispensable.

Car line and gas works.—The Habana Electric Railway & Power Co., authorized capital \$30,000,000, was incorporated at Trenton, N. J., as a holding concern to effect the merger of the Habana Electric Railway Co. and the Companhia de Gas y Electricidad de la Habana. Habana advices are that the new company proposes to expend at once nearly \$4,000,000 in improving its street car lines and its generating plant and will place modern gas-making machinery in its gas plant, thereby reducing the cost of gas materially, encouraging the use of gas ranges in place of the small charcoal stoves now universally used throughout Cuba and which are imported from Germany.

The new station of the Habana Terminal Co. on the arsenal grounds will be ready August 1, from which date all trains of the United Railways, the Western Railways, and the Habana Central will have their terminus there; 78 trains will leave and enter every day. The old Cristina Station of the Western Railways will then be used as a warehouse for local freight. Offices of the several lines will be in the upper rooms of the new station. Officers of the company have approved of General Manager Orr's proposal to extend the railroad 2 miles in Pinar del Rio from Guane Station to the town of Guane, and also 5 miles in Santa Clara Province between Esles and Cienfuegos. This work will be pushed at once and the company expects to have a daily train direct from Habana to Cienfuegos by the end of the present year.

HOLLAND-AMERICAN MORTGAGE BANKS.

[From Consul Frank W. Mahin, Amsterdam.]

Four Holland-American mortgage banks have been founded in this district since January 1. The development of newer sections of the United States where interest rates are high is the cause of this. However, doubts are entertained if they will meet with success, owing to the keen competition here for loanable funds.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8754. Electric cars and material for light and power company.**—An American consular officer in a Latin American country has been requested by the board of directors of a light and power company in his district to forward the information that the company would be willing to accept a reasonable proposition from any manufacturers in the United States of electric street cars, and from any manufacturers of supplies for electric tramways, for about 20 electric street cars and such supplies as are required for an electric tramway or an electric-light plant. Copy of the complete report, containing the names of persons to be addressed regarding this matter, as well as further particulars regarding the proposition, can be obtained from the Bureau of Manufactures.
- No. 8755. Store fixtures and fittings.**—An American manufacturing company has written to the Bureau of Manufactures that one of its representatives in the West Indies is in the market for some up-to-date store fixtures, fittings, etc., and desires catalogues with illustrations, descriptions, and prices from reliable manufacturers in the United States.
- No. 8756. Meat-cutting machines and sausage casings.**—An American consul in a European country reports that a business man in his district desires to be placed in correspondence with manufacturers of meat-cutting machines for butchers and sausage makers and also for household use. He also wishes business connections with manufacturers of all kinds of casings for sausages.
- No. 8757. Toothpick machinery.**—A resident of a foreign country informs an American consular officer that he is anxious to secure the names of American manufacturers of toothpick machinery with a view to making purchases from such firms. All communications should be sent to the consular officer in question for transmission to the inquirer.
- No. 8758. Waterproof clothing.**—An American consul in a South American country reports that a merchant in his district is desirous of purchasing American waterproof (not rubber) clothing. This merchant, it is stated, enjoys an excellent reputation.
- No. 8759. Machinery for the manufacture of crosshead bale ties.**—The Bureau of Manufactures is in receipt of a communication from a business firm in Canada asking to be put in touch with American firms producing machinery for the manufacture of crosshead bale ties.
- No. 8760. Information concerning commercial education.**—An American consular officer in a European country reports that a resident of the country in which he is located desires to be furnished with full information concerning commercial education in the United States. He would like to receive from commercial schools and colleges catalogues with courses of study, statistical information, etc. Such printed matter should be sent direct to the inquirer.
- No. 8761. Glass-blowing machines for window glass.**—A business man in a European country informs an American consular officer that he desires to communicate with American manufacturers of glass-blowing machines for window glass. He is of the opinion that such machines are manufactured in the United States and have been exported to several European countries. He is anxious to purchase these machines for a glass factory owned by him. Correspondence may be in English.
- No. 8762. Bottling and bottle-cleaning machinery.**—A general merchant and bottler of soft drinks in an Asiatic country contemplates the purchase of new bottling and bottle-cleaning machinery to replace the old machinery now used by his firm. His present plant has an output of 200 dozen bottles daily, but permits the bottling of only one bottle at a time and is in constant need of repairs. He informs an American consulate that he prefers to bottle three at a time; a cheap and simple machine is desired. Copy of the complete report, containing further details, will be sent to interested firms by the Bureau of Manufactures.
- No. 8763. Food products.**—A firm in Portugal desires to communicate with American houses purchasing green chestnuts, peppers, anise and cummin seed, olive oil, garlic, onions, etc. Correspondence in Spanish or Portuguese.

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MINERAL WATERS AND SOFT DRINKS.

AUSTRIA.

[From Vice Consul Robert C. Boesel, Carlsbad.]

The principal towns in this consular district are the cure resorts, Carlsbad, Marienbad, Teplitz, and Franzensbad. These are visited by over 200,000 people annually, who come solely to "take the cure." Besides drinking the medicinal waters, the visiting "cure guests" are the principal consumers of mineral table waters in this consular district.

This part of Bohemia produces many brands of table waters, and five or six of them, coming from this immediate vicinity, are used so extensively in Carlsbad that foreign waters would stand little chance of entering this market. The "cure" physicians are in the habit of recommending certain brands of table water for use by their patients. This indicates the nature of the competition American firms would have to meet here.

As for the brands of mineral water sold in Carlsbad, the leading ones are Giesshübler, Krondorfer, Biliner, Neudorfer, and Klösterle. Such a well-known European brand as Apollinaris, which can be found almost anywhere on the Continent, can not be sold in Carlsbad, owing to the domination of these brands.

During 1910 Austria exported more than seven times as much mineral water as it imported, and the greater part of these shipments originated in the Carlsbad consular district. The only possible demand for an American mineral water in this vicinity would have to come from the Americans, who congregate here in large numbers during the "season."

[From Consul Ralph J. Totten, Trieste.]

Brands and Prices in Trieste.

During 1910 the total imports of mineral waters into the city of Trieste were 542,454 short tons, valued at \$260,279, and the total exports 372,537 tons, valued at \$178,750.

Mineral waters came into Trieste from other parts of Austria and from Hungary, Germany, Italy, France, Belgium, and Great Britain; and were shipped to points in Austria, Italy, Turkey, Russia, England, China, Japan, Brazil, the Balkans, and the United States. No mineral waters of any kind were received from the United States, and, generally speaking, American mineral and table waters are unknown in this district.

The table waters most used locally are Radein, fonte Gisella, which sells wholesale at \$8.53 per 100 bottles of 1 liter (1.057 quarts) each, and Rohitsch Sauerbrunnen, at \$8 per 100 liters. The laxative waters are Hunyadi Janos, at \$9.54 and Loser-Janos, Rakoczy, at \$9.14. For export the most popular table water is Giesshübler Mattoni, at \$9.34 per 100 liters, and laxative is Carlsbad Muhlbunnen, at \$13. The retail prices are 10 to 15 per cent above the wholesale prices. Mineral waters are jobbed locally at 30 days net cash.

Duty and Credit—Unfavorable Outlook.

The conventional rate of duty on mineral waters coming into Austria amounts to 1.20 crowns per 100 kilos (11.04 cents per 100 pounds; 24.36 cents per 220.46 pounds).

The credit terms received on this class of merchandise are 3 to 12 months, 3 months being the usual time asked.

The general opinion of local dealers is that it would be somewhat difficult to introduce a new mineral water into the Trieste district, as this section of Europe is especially rich in natural springs; but several have expressed a willingness to consider any proposition submitted. It is feared that the freight from America would make the prices too high for successful competition.

FRANCE.

[From Consul General A. Gaulin, Marseille.]

Mineral waters consumed in the Marseille district are almost exclusively of French origin. The St. Galmier, Coizan, and St. Alban brands, retailing at 30 centimes (5.79 cents) per liter (1.057 quarts), are sold in largest quantities, but the higher-priced Evian, Vichy, Vittel, and Contrexeville waters have also a steady sale. The only foreign waters sold here to any extent are Apollinaris and Giesshübler, which retail at 80 and 85 centimes (15.4 cents and 16.4 cents), respectively.

A limited market exists for American mineral waters, which would probably find customers among the hotels in Marseille and the Riviera resorts frequented by American tourists. This would require, however, a central depot from which supplies could be readily obtained. Direct importation by the consumers is out of the question.

It should be noted that natural mineral waters can be imported into France only when upon the official list of authorized mineral waters. Every shipment must also be accompanied by a certificate of origin issued by the local authorities and legalized by the French consular officer of the district.

Procedure for Authorization—Artificial Waters—Duty.

To obtain the necessary authorization, application must be made to the Minister of the Interior, and samples furnished, a certain num-

ber of bottles having been filled in the presence of a French consular officer and by him sealed, the case also bearing the consular seal. These samples are analyzed by the chemists of the National Academy of Medicine. The only natural mineral water of American origin, the sale of which has been authorized thus far in France, is from a Massachusetts lithia spring.

Artificial mineral waters may be sold in France without previous authorization, but these can be imported only in bottles or jars bearing, in indelible type, the words "eau artificielle" (artificial water). The importation in casks or receptacles other than those mentioned is prohibited. Samples of each shipment are analyzed by official chemists. Siphons must be in perfect condition.

American mineral waters of every description are subject to an import duty of 20 francs per 100 kilos (\$1.84 per 100 pounds) net weight. The importation of mineral waters from countries entitled to the minimum tariff is duty free.

GERMANY.

[From Consul General Robert P. Skinner, Hamburg.]

Although fashionable hotels and restaurants in Germany keep in stock a few cases of American mineral waters, the present demand for them is of no commercial importance, and it may be doubted whether it would be profitable to attempt to create one by advertising and otherwise. Waters of medicinal value might, perhaps, be urged into favor because of their special merits, but of mere table waters there are so many of domestic origin, available at low prices, as to render competition difficult after payment of freight and other charges.

Mineral waters, including the container (provided the container, if empty, would be subject to a duty of no more than 74 cents per 220 pounds), are free of duty. That is to say, the bottle must be of ordinary type, and without mechanical closing apparatus, if, with contents, it is to be entered free of duty; otherwise the duty is calculated according to the character of the bottle. The duty is virtually prohibitory on mineral water in other than simply corked plain glass bottles.

The one American water for which there exists a certain demand in German hotels patronized by Americans costs at retail \$4.28 per 20 bottles, or 24 cents per bottle, containing three-quarters of a liter (liter = 1.057 quarts). The importer who quotes this price quotes also well-known European waters at the following figures: Apollinaris, $\frac{3}{4}$ liter, 8.3 cents; Apentawasser, $\frac{3}{4}$ liter, 14 cents; Hunyadi Janos, $\frac{3}{4}$ liter, 14 cents; Contrexeville, 1 liter, 24 cents; Evian, 1 liter, 24 cents; Fachinger, $\frac{3}{4}$ liter, 10.7 cents; Giesshübler, 9.9 cents; Sprudel (Carlsbad), 1 liter, 19 cents; St. Galmier, 1 liter, 13 cents; Vichy, 1 liter, 22 cents; Wiesbaden, $\frac{3}{4}$ liter, 20 cents.

Low Price Necessary—Imports and Exports.

An ordinary table water such as the managers of popular cafés and restaurants might take up, should be sold at wholesale at not over 5 cents per bottle. The American water now on sale here brings 35 cents at hotel bars and 60 cents in the restaurants of the same hotels. Naturally, the quantity sold is trifling, and importers keep only a few cases on hand to maintain their assortments.

Germany's foreign trade in mineral waters, including weight of containers, for 1909 and 1910, was as follows:

Imports and exports.	1909	1910	Imports and exports.	1909	1910
	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>
Total importations.....	9,789.8	11,226.2	Total exportations—Con.	2,316.7	2,497.6
From France.....	1,048.3	1,014.7	To Austria-Hungary.....	2,879.3	2,803.9
Austria - Hungary.....	8,636.6	10,095.8	Switzerland.....	2,322.9	2,322.4
Total exportations.....	40,635.5	45,466.9	United States.....	2,618.2	1,332.1
To Netherlands.....	11,440.2	15,568.9	France.....	904.8	836.2
Belgium.....	10,117.7	11,168.5	British West Africa.....	602.7	679.7
Great Britain.....	3,912.6	4,635			

[From Consul Herman L. Spahr, Breslau.]

Bohemian and Rhenish Brands at Breslau.

There has been a remarkable increase in the consumption of table waters in Germany, the sale now amounting to over 100,000,000 bottles a year.

Owing to the numerous mineral springs in Germany and the proximity of Bohemia, there are many established brands on the Silesian market, and a dealer will not accept an agency at any risk to himself. The freight to Breslau would probably make it almost impossible for an American water to compete successfully with the well-known Bohemian and Rhenish brands.

The tariff does not provide a duty on foreign mineral waters, but bottles of unusual design or with unusual devices are dutiable. Advertising matter is subject to a duty of 6 marks per 100 kilos (\$0.648 per 100 pounds).

Of the more expensive brands on this market the Biliner and the Fachinger are the most popular, while the Grafenorter, Altheider, and Zentnerbrunnen (all Silesian spring waters) lead among the cheaper.

RUSSIA.

[From Consul General John H. Snodgrass, Moscow.]

A large amount of bottled water, both domestic and imported, is used in Moscow. Narzan, Essentuki, No. 20, and Borjom are the principal Russian brands, while of the imported, Apollinaris and Vichy are the most often seen. Kissingen and Emser are popular German waters.

The value of the imports of mineral (natural and artificial) waters for the past three years was: In 1908, \$11,000; in 1909, \$14,000; in 1910, \$10,500. As duty is levied on the water by weight of the entire package, the statistics do not show the importations in gallons.

Under the Russian tariff, mineral waters, both natural and artificial, pay an import duty of 2.30 rubles per pood (3.28 cents per pound), weight of receptacles included, except those medicinal mineral waters enumerated in special lists drawn up by the Medical Council of the Ministry of the Interior in concurrence with the Ministries of Finance and of Agriculture and State Domains. The latter pay duty at the rate of 1 ruble per pood (1.43 cents per pound). The treaties concluded by Russia with Germany, France, and Austria-Hungary contain lists of mineral waters admitted at the rate of 1 ruble per pood.

NORWAY.

[From Consul General Henry Bordewich, Christiania.]

There are 16 mineral-water plants in Christiania that manufacture, besides the more common kinds of such beverages, also some very fair imitations of the waters known as Emser, Apollinaris, Carlsbad, and Vichy. The genuine waters of the same names are imported to some extent. The terms on the imported waters are 90 days with a discount for cash. In my opinion, the outlook for the sale of American goods of this character is not promising.

Soft drinks are not so commonly used in Sweden as in the United States, by reason of the short, cool summer, and it is doubtful if a market could be found here for fruit sirups, as juices of different kinds of both cultivated and wild berries are sold at very low prices. The bottlers of soft drinks in Christiania manufacture the soda and sirups in their own laboratories.

[From Consul P. Emerson Taylor, Stavanger.]

All-Year-Round Demand in Stavanger.

It is estimated that in a normal season, or rather a moderately warm season, there are used in the Stavanger district about 500,000 bottles of soft drinks. The quantity varies greatly from year to year. In a cold, rainy summer the amount is much less than this, while if the weather is unusually warm nearly a million bottles are consumed.

The soft drinks most used here are Selters, "Saft"—which is fruit juice made from oranges, lemons, apples, pears, and several other kinds of fruit—the ordinary American pop, and similar temperance drinks. There are no soda fountains in the district. Ice-cold drinks are practically not used at all. Ice cream and ices are likewise almost unknown and are never kept in stock even in the summer, but are made on order for special occasions.

While a smaller quantity of soft drinks is used during the summer than in communities of similar size in the United States, yet a larger amount is consumed throughout the remainder of the year. During those years in which the summer is very cool perhaps the greatest quantity of soft drinks is used in midwinter when most of the dinner parties, banquets, and balls are held. Fruit juices are also used very generally in cooking, in making puddings and desserts.

SPAIN.

[From Consul Charles L. Hoover, Madrid.]

The consumption of mineral waters in Spain is large, but those used are almost exclusively of Spanish origin. The two table waters having the widest sale are the Insalus and the Solares. A certain amount of the French Evian water is sold, but its use is limited to the hotels, where it is sometimes called for by foreigners.

Credit terms here are governed by much the same considerations as in the United States. Theoretically all business is done on a cash basis; in practice all sorts of terms are arranged, but where credit is allowed it is usually for 60 or 90 days. Several dealers in mineral waters have stated that they do not pay for the water they receive from the bottling companies until after they sell the goods. Where sales are brisk, accounts are presented monthly and may cover any number of consignments.

SWITZERLAND.

[From Consul General R. E. Mansfield, Zurich.]

The hundreds of hotels, restaurants, bathing establishments, and "cures" throughout Switzerland and the thousands of tourists annually visiting the country cause an unusually large consumption of mineral waters. Estimates made by wholesale dealers place the annual consumption at somewhat over 5,000,000 bottles.

Including the domestic waters, there are about 60 brands on the market, offering a varied selection in price and quality. The sale of the Swiss waters is the greatest, followed by the German, French, and Austrian. The following are the principal waters used:

Brands.	Countries of origin.	Approximate annual sale, in bottles.	Retail price.	
			Per bottle.	Per half bottle.
Vichy.....	France.....	400,000	\$6.19	.....
Eggleau.....	Switzerland.....	380,000	.10	\$0.08
Paeugg.....	do.....	360,000	.12	.08
Giesenhübler.....	Austria.....	250,000	.14	.09

Brands and Prices.

About three-fifths of the Vichy water is consumed in the French sections of Switzerland and the remainder in the German Cantons. The German and Austrian waters are popular chiefly in the German and Italian sections.

Other well-known mineral waters on the Swiss market are: French—Evian, St. Galmier, Vittel; German—Apollinaris, Selters, Ems; Austrian—Carlsbad, Marienbad, Hunyadi; Swiss—Tarasp, St. Moritz, Val Sinestra, Brimenstorf, Wildegg, Pilatus. The prices per bottle range from 10 cents for Pilatus to 23 cents for Vittel and Val Sinestra, but are subject to a discount of 1 cent per bottle on orders of 12 whole or 20 half bottles. Two cents less per bottle is asked when 30 whole or 50 half bottles are taken. Wholesale prices are subject to much larger discounts.

A bottle customarily holds about three-fourths of a quart, but Vichy, Ems, Wildegg, and a few others are sold in liter bottles (liter=1.057 quarts). Many brands are equipped with patent stoppers and sealing devices. The Ems and Selters waters are sold also in liter and half-liter jugs. Mineral waters are usually shipped open in the cars, packed in straw and corrugated paper. Vichy, Evian, and some other brands are also shipped in cases of 50 bottles, but the former method is preferred, as breakage is less.

Imports—No Prejudice Against American Waters.

The magnitude of the mineral-water trade of Switzerland is further evidenced by the large imports. During 1910 approximately 3,000,000 bottles were imported, their value being \$219,458. Of these imports Germany supplied \$93,596 worth, France \$93,728, Austria \$25,266, and Italy \$4,416. Small quantities come from England, but no American mineral waters are imported into Switzerland. The imports are practically all natural waters, as very little artificial water is used in the country. Exports in 1910 amounted to 1,254,220 pounds, valued at \$38,186, chiefly the better grade of Swiss waters, sent to France, Germany, Austria, and Belgium.

The successful introduction of American mineral waters into this market would be met with many difficulties. Hotels are by far the greatest consumers, and as Swiss hotels are very conservative it is doubtful if they could be induced to keep the American product in stock, unless demanded by their patrons. The principal Zurich importers and dealers seem ready to consider any proposition submitted by firms in the United States, as there is no prejudice against American waters, but state that the distance from the market and the difficulty of handling and transshipping this class of merchandise, together with high freight rates and the strong competition now existing between the various imported and domestic mineral waters, make it appear that the American product could not compete with the brands already popular in Switzerland.

TURKEY.

[From Consul General G. Ble Ravndal, Constantinople.]

Soft drinks are popular in Turkey, and the amount of ordinary soda water consumed is considerable. Likewise the quantity of mineral water for table purposes sold in Turkey, and more especially in Constantinople, has greatly increased of late. The German brands have a good sale here, particularly Giesshübler; Apollinaris and Vichy are also in demand.

In seeking an opening for American goods it would be well to get in communication with a reliable agent in Turkey, who could handle such mineral water in a way to control the general trade. This is preferable to selling direct to dealers, as the agent knows the field and his customers. The general discount is 2½ to 5 per cent for cash and three to six months' credit. All quotations should be c. i. f. Constantinople or other Turkish port, and never f. o. b. in the United States. Correspondence should, in general, be in French. The import duty is 11 per cent ad valorem.

There is no reason why an American mineral water should not compete successfully with the European brands now on the market, if handled and presented to the trade properly by a suitable agent.

[From Consul William Coffin, Jerusalem, Syria.]

There is a considerable consumption of bottled waters in Jerusalem and Jaffa on the part of tourists (approximately 5,000 annually), as they fear the local water. All hotels keep such waters in stock, the chief brands being Vichy and Apollinaris, with some others from Austria.

Quotations per 50 bottles of Vichy range from \$3 for St. Galmier to \$7.45 for Carlsbad. Evian sells at \$6.40 for 60 bottles. These prices are c. i. f. Jaffa, with four months from date of bill of lading. The local commission agents receive 5 per cent. Apollinaris is quoted: Large bottles, \$5.60 per case of 50; small bottles, \$4.40 per case of 48; f. o. b. London, net cash against bill of lading; 5 per cent discount for purchase of 20 boxes at one time; 5 per cent to local commission agent.

The chief opportunity for the sale in Syria of mineral waters from the United States would be the demand of the 1,500 to 2,000 Americans who visit Palestine yearly. They would naturally welcome a familiar product and use it in preference to other brands. It is probable that for an initial order it would be advisable to extend

some credit. If, notwithstanding higher freight costs, European prices can be met, there should be an opportunity for some business here. In any attempt to enter this market, a little sign advertising to catch the American traveler's eye would be of great advantage.

JAPAN.

[From Consul General Thomas Sammons, Yokohama.]

The springs whose waters are now being bottled in Japan may be divided into two groups, the foreign and the native owned and operated.

The foreign companies put up their entire production as plain table water, but the Japanese companies do not bottle over 10 per cent of their output as plain water, the remainder being sweetened, flavored, and sold as "soda pop," which the Japanese prefer. These native companies supply the native demand, but at most the business is small. The foreign companies supply practically the entire foreign resident and hotel trade, but the bulk of their product is exported.

Aerated waters can be marketed at very moderate prices because labor and transportation costs are low and bottles are made by hand as cheaply as by machinery in the United States. Pint bottles are the standard size, and are sold at 1.3 cents each. Packing crates, which cost 17 cents each, hold 4 dozen bottles. The price per case of 4 dozen pints is \$2.60 by the foreign companies and 25 or 30 cents cheaper by Japanese companies.

Apollinaris is practically the only foreign water imported, but its sale is small, as not more than 250 cases are brought into the whole Empire per year. The foreign companies produce about 400,000 dozen pints per year and export most of it, owing to the slight call from the resident and transient foreign population. The Japanese do not demand table waters, and from present prospects there are no signs for future development of the trade in such goods.

SIAM.

[From Vice Consul General Carl C. Hansen, Bangkok.]

The mineral waters consumed in Siam come from abroad, as the natural mineral springs which are said to be found in various parts of the country have not been exploited up to the present time and there are no manufactories of artificial mineral waters.

Mineral water is used in Siam both for medicinal purposes and as a beverage. The value of the total imports of aerated and mineral waters during 1911 was \$4,476, the United Kingdom and dependencies contributing \$2,294 worth, Germany \$1,020, France \$685, Japan \$351, and all other countries \$126. Among the various mineral waters sold in Bangkok are the Apenta, Hunyadi Janos, Vichy, Tansan, Apollinaris, and Franz Joseph. The sale of mineral waters in Siam appears not to have been pushed to any extent, and perhaps this is the reason for their comparatively small importation, yet there is no doubt that a well-advertised, low-priced table mineral water would in time find a ready market in Bangkok.

Large quantities of soda water were imported into Bangkok from Singapore up to the year 1910, when the importing firm opened a factory in Bangkok. There are at present two aerated-water manu-

factories in this city conducted by Europeans, besides smaller native factories. The retail price per dozen "cods" of soda is 37 cents, and for sweetened water 46 cents, but the bottles are charged for at the rate of 74 cents per dozen, being returnable at the same rate. Soda-water fountains are entirely unknown in Bangkok, and there are no places where "soft" drinks are obtainable except hotels.

SOUTH AFRICA.

[From Consul Edwin N. Gunsaulus, Johannesburg.]

During the past five or six years the importations of mineral waters have steadily decreased, owing to the marketing of South African mineral waters, such as Van Riebeeck, Vasco, and others produced in Cape Colony and other parts of the Union.

The brands of foreign mineral waters imported into the Johannesburg consular district may be taken in the order of their importance as follows: Teplitz, an Austrian water supplied to private houses, hotels, and clubs; Schweppes, a German water which is almost entirely sold in bars and hotels for mixing with spirits, also supplied to some extent for household use; Apollinaris, which is extensively sold here, as it is in most parts of the world, and is largely found in private houses, hotels, and clubs; Perrier, a French mineral water for table use for private houses, clubs, and hotels. The customs duty on all mineral waters imported from foreign countries into the Union of South Africa is 25 per cent ad valorem.

Importers of mineral waters as a rule pay cash against documents. Inquiry made of firms here now representing foreign mineral waters discloses the fact that none of them at present cares to take any further agencies, as there is such a small demand for imported mineral water.

FRENCH WEST INDIES.

[From Consul T. R. Wallace, Port-de-France, Martinique.]

The quantity of table and medicinal mineral waters consumed annually in Martinique is large, the greater part of which is procured from natural springs located on the island and sold very cheap. The springs are not far from the city, and the water, supplied in bottles that preserve the natural gases, is named after the localities where procured, Didier and Moutte. The price per liter (1.057 quarts) is 5 cents, if the empty bottle is returned.

The other mineral waters offered are Vittel, Contrexeville, Vichy, and Vals. The best quality of these brands retails at 20 cents per liter, and 10 cents per liter is asked for the cheaper grades of the same waters. Seltzer water is used at the restaurants and hotels to a large extent.

The general rate of customs duty, applicable to mineral water from the United States, is \$3.86 per 100 liters; mineral water is admitted free from countries entitled to the minimum tariff. There are also the following additional charges: Lighterage per case, 5 cents; statistics per package, 3 cents; wharfage per 110 pounds or fraction thereof, 1 cent; octroi on bottles, per 1,000, 20 cents. Freight from New York is 15 cents per cubic foot plus 5 per cent, or 30 cents per 100 pounds plus 5 per cent. The steamship company has the option to choose

which of the charges to accept. Heavy freight is \$5 per ton of 2,240 pounds.

With respect to grape and other fruit sirups, there would seem to be no present opening to introduce such goods to the trade of Martinique. There is but one bottler of soft drinks on the island. No soda fountains are in use in the district. The only soft drink used to any extent is bottled lemonade. It can be made very cheaply from the limes and oranges which grow plentifully here. It is mostly drunk mixed with rum and often with beer.

Records of the Bureau of Statistics show the imports of natural and artificial mineral waters into the United States to have aggregated in value \$1,128,814 in 1909, \$961,686 in 1910, and \$1,067,502 in 1911. For previous articles on mineral waters see Daily Consular and Trade Reports for April 29, October 30 and 31, and December 30, 1911.

Lists of names of bottlers, soda-fountain users, mineral-water dealers, etc., furnished by American consular officers in many foreign countries, will be supplied, upon application, by the Bureau of Manufactures.

A very complete review of the mineral-water industry abroad was issued in 1901 as Special Consular Reports, Volume XXII, part 2, which may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 10 cents a copy.

FIRST MESSAGE OF PRESIDENT YUAN SHI KAI.

[From a press dispatch from Peking.]

On April 29 Yuan Shi Kai, President of the Chinese Republic, delivered his first presidential message in the form of a speech at the opening of the session of the Advisory Council, which is practically a provisional senate. The President proclaimed that the principles of the new Chinese Government must be the maintenance of order in the interior, the achievement of progress, and the retention of external friendships, which are necessary to the existence of China.

Yuan Shi Kai emphasized the necessity of forming a firm foundation on which to base the policy of progress. The most important matter at present, he said, was finance. Foreign capital being essential to China, the Government is drafting the principles of a financial reform. It is negotiating with the powers for an increase of the customs duties and the abolition of the likin or transit taxes, and the reduction of the export taxes, by which means the income from the maritime and native taxes will be increased to 60,000,000 taels (approximately \$42,000,000), from the present total of 44,000,000 taels (approximately \$30,800,000). This increase would suffice to pay for the amortization of the foreign loans. Railroad and other loans will probably pay for themselves. Pending the big loan the Government will issue short-term Treasury bonds.

Yuan Shi Kai recommended plans for lightening the burden of the people, for proper surveys of lands, for a new scale of taxation, for a unified system of currency, and for standard weights and measures. He pointed out that with the establishment of a Republic industrial development had become of the first importance. Ministries of forestry, industry, and commerce are to be established to encourage and subsidize industries and to educate students. The mining laws are to be reformed, and commercial laws adopted and enforced. Religious liberty will be guaranteed. The Ministry of War has been instructed to reduce the number of the troops in China.

Consul P. Emerson Taylor reports an increase of \$43,000 in declared exports to the United States from Stavanger, Norway, during the first quarter of 1912 over the 1911 quarter. Sardines composed \$246,029 of the \$403,315 total. Herrings in oil, tomatoes, and bouillon increased by \$74,500, and aggregated \$102,899.

NEAR EASTERN BUSINESS NOTES.

[From the Levant Trade Review, Constantinople, published by the American Chamber of Commerce for the Levant.]

Organization membership.—The membership of the American Chamber of Commerce in the Levant has grown from 75 at the outset to 425 and is still growing.

Industries at Jerusalem.—At Jerusalem the Bezalel school is producing carpets of the finest designs, and working in gold, silver, copper, and other metals. There are many factories of olive-wood articles and mother-of-pearl goods in Bethlehem. [An article descriptive of the mother-of-pearl industry in Palestine will appear in the May 14 issue of Daily Consular and Trade Reports.]

Emigration from Constantinople to the United States continues, those of Russian origin being about 175,000; from Roumania about 2,000; from Bulgaria, Servia, and Montenegro about 5,000; from Turkey about 35,000; and from Greece about 2,500. These emigrants send back money and information regarding America's natural resources and industries, and help to build up trade between the two countries.

Progress in Cyprus.—Like other agricultural countries, Cyprus is importing everything from abroad. Should a depot be established in Larnaca for different agricultural implements and other machinery, a good business might result. Although the island is an agricultural country, great quantities of flour are imported from abroad, chiefly from France, Italy, and Turkey. The value of the imports in 1912 was \$2,863,544, the principal articles being flour, cotton goods, lumber, sugar, and leather goods. An American school has been established in Larnaca by the American mission of the Reformed Presbyterian Church, and a fine new building has been constructed on a beautiful site. There is a plan under consideration for connecting Larnaca, the chief port of the island, with the capital by a railway. All other towns and villages are well connected by carriage roads, and there is every facility for travel by automobile. The passenger connection between Larnaca-Nicosia and Larnaca-Lamassol is maintained by a daily motor bus.

[From the Near East.]

Nail works.—Turkish capitalists have asked their Government for a concession for the erection of a wire-nail works.

The express delivery service has been extended to Constantinople, and is available for correspondence posted at the British post office, Constantinople, for Great Britain.

Navigation.—The Turkish navigation company Mahroussa is to be turned into a private company, in which the Ottoman Government is to take a 50 per cent interest.

The taxicab companies of Bucharest have amalgamated with one or two factories, including the "Fiat," with the object of creating a powerful monopoly in this particular line of the motor trade for Roumania. The initial capital is of \$140,000, and the name of the company is the Société Roumaine des Taximètres.

Public-road building.—The Entreprise Générale des Routes Ottomanes has finished the preliminary study for the building of the 205-mile highway between Trebizond and Erzerum and the definite plans of the same for about 87 miles. Of these, plans for 37 miles submitted to the Government have been approved, and the building of the road has started. Besides the above, the same company has under study the roads between Erzerum and Harput and Trebizond and Rizeh.

FOREIGN TARIFFS.

RUSSIA.

[From Board of Trade Journal, Apr. 18, 1912.]

Increased Rates on Agricultural Machinery and Parts.

Owing to the failure of the Duma to adopt some legislation with regard to the customs treatment of agricultural machinery and parts, the temporary exemptions and reduced rates on the articles enumerated in the appended schedule went out of effect on April 14, such articles now being subject to the rates given in the last column of the schedule. A Government bill for the reenactment of the lapsed tariff provisions is to be introduced on the reassembling of the Duma. It is understood that instructions have been issued to the customs authorities to permit agricultural machinery arriving in Russia on or after April 14 to remain in bond for one month from the date of arrival.

(Ruble=51.5 cents; pood=36.1128 pounds; funt=0.90282 pound.)

Tariff No.	Articles.	Rate of duty.	
		Prior to Apr. 14, 1912.	Present.
187	Machines and apparatus, complete or incomplete, fitted together or in parts: 5. Traction engines connected with complex thrashing machines and plows.....pood..	Rubles. 0.75	Rubles. 3.20
	6. Reaping and sheaf-binding machines; reaping machines with automatic ejectors; steam plows, complicated clover-thrashing machines with two drums, complicated steam thrashers with beater drums in which the length of the beaters is not less than 4 feet 3 inches, and with spike drums having a length of not less than 40 inches; hay-tossing machines; raking machines (horse drawn); machines for sorting grass seed; sorting machines with spiral wire cylinders; potato-sorting machines; machines for scattering powdered fertilizers; pulverizers, bellows, and injectors for vines and trees; grape-crushing machines; continuous wine-pressing machines; centrifugal cream separators and parts thereof; all kinds of newly invented or perfected agricultural machines and implements ordered by experiment stations and museums.....	Free....	.75
	11. Spare parts of agricultural machines and implements imported together with such machines and implements— a. For any of the machines enumerated in subdivision 6 of the present number (187).....	Free....	(1)
	Note 5.—Implements and apparatus for destroying animals noxious to agriculture, as set out in the list prepared by the Minister of Finance in concurrence with the Ministers of Agriculture and Imperial Domains..	Free....	(2)
	Note 6.—The parts of agricultural implements and machines named in the following list, whether imported with the implements or machines or separately: Case-hardened steel cut in the form of moldboards for plows; steel teeth for horseshoes; steel disks for cultivators, plows, and cultivators (in finished state); guards, sections, and complete knives for reapers; seed tubes for drills; binder attachments for self-binders, and parts of such attachments; ribbed beaters for thrashing machines, finished or not; also shaped steel for beaters.....pood..	Free....	(1)
190	Note 3.—Manila binder twine for self-binders, not exceeding 30 poods (1,083 pounds) with each binder attachment.....pood..	Free....	1.05
194	Note.—Canvas for self-binders and sorters.....funt..	Free....	.33

¹ At 4.20 rubles per pood, if of iron or steel, with or without parts of other materials, and not containing more than 25 per cent of copper; otherwise, 8 rubles per pood.

² Not specified; probably dutiable as apparatus not specially mentioned, at 2.10 per pood, when of iron or steel, with or without parts composed of other materials, and not containing more than 25 per cent of copper; and at 8 rubles per pood when containing more than 25 per cent of copper or its alloys.

AUSTRALIA.

Supplement to Customs Tariff.

Another supplement to the Australian tariff has been published recently by the Bureau of Manufactures as Tariff Series No. 17D. This supplement embodies all the amendments to the tariff which

were made in December, 1911 (see Foreign Tariff Notes, No. 5, p. 134), likewise a number of other changes in the tariff and the customs regulations which have been made since 1910.

URUGUAY.

[Reported by Consul Frederic W. Goding, Montevideo.]

Postponement of New Pharmacy Regulations.

The Uruguayan pharmacy law, containing, among other provisions, regulations for the sale of patent medicines and pharmaceutical specialties, which was to take effect April 22, 1912, will not be put in force until April 22, 1913. An important provision of the law is that unless a pharmaceutical specialty has been authorized for sale by the National Council of Hygiene it shall not be sold except on prescription. Druggists are authorized to sell without a special ruling of the National Council of Hygiene medicinal preparations made in their pharmacies, the formulas for which are included in any official pharmacopœia. All foreign pharmaceutical specialties, whether or not the formula is included in an official pharmacopœia, may be sold only under authorization of the council. The name of the product must indicate the principal ingredient or ingredients, and the quantity of the ingredients must be indicated on the label. Those pharmaceutical specialties, authorization for the sale of which is requested, must be possessed of real pharmacological merit; applications for permission to sell such medicines must be accompanied by samples and a detailed description of their composition.

[Copies of the approved form for application for the sale of patent medicines and pharmaceutical specialties and the complete text of the pharmacy law are on file in the Bureau of Manufactures.]

OPEN-END STAMPED ENVELOPES.

[Announcement of United States Post Office Department.]

Postmasters are notified that the department has available for issue a supply of open-end stamped envelopes which were manufactured under the contract ended June 30, 1911. These envelopes are all plain, and no special-request envelopes of the open-end pattern can be supplied.

The open-end envelope is intended for the mailing of matter of the third class. One of the end flaps instead of the top flap remains unsealed, and contents can be readily examined. The opening is smaller than in envelopes with top flap unsealed, affording less chance of loss of contents in transit or of other pieces of mail matter getting caught in the opening.

The open-end envelope can be furnished, while the supply lasts, in the following varieties of 1-cent denomination: No. 5, white and amber; No. 6, white and manila; No. 8, white and amber; No. 13, white, amber, buff, and blue.

The selling prices of open-end envelopes are the same as for corresponding varieties of the regular unprinted open-top pattern. Postmasters are directed to advise interested patrons that these envelopes are available.

Agricultural Exhibition at Prague.

Consul J. I. Brittain suggests the exhibition of American farm machinery at the annual agricultural fair at Prague, Bohemia, this year's event continuing from May 15 to 19. An effort is now being made to introduce gasoline traction plows on large Bohemian estates. Exhibits for the fair will be carried freight free on the return journey over Austro-Hungarian railways.

FOOD CONTAINERS FOR TROPICS:

[From Consul Thomas R. Wallace, Fort de France, Martinique, French West Indies.]

Manufacturers and exporters of cereal products and food preparations intended for tropical countries should change the material of the containers in which such goods are packed, if the trade therein with tropical countries is desired. The American exporter at present sends to tropical countries the same packages as are prepared for home consumption. The wrappers or containers are found to be unfit to meet the conditions to which they are subjected in the hot and humid countries of the Tropics.

Packages of cereals or other food preparations when inclosed in paper containers are soon infested with destructive insects, which cause them to be unfit for use. Merchants who have attempted to carry such goods, delivered to them in paper or cardboard packages, after a trial gave it up, as the losses greatly exceeded the profits and further orders were withheld. The purchaser would also find that before a package could be used at his home the insects would work through the paper or cardboard covering and destroy much of his purchase or render it of no value.

The container for such products should be of tin or glass when intended for the tropical trade, especially in the countries subject to great humidity. Cereal food preparations should meet with ready sale in tropical countries, and if put upon the market properly prepared to withstand the conditions to which they would be subjected, increased sales would eventually follow. Continuing the practice of sending such goods in paper or cardboard packages will ultimately result in closing the market against them, unless a method is devised to protect such products from the attacks of insects common to tropical countries and which are almost impossible to guard against by ordinary means.

MILK-BOTTLE TRADE IN JAPAN.

[From Consul General Thomas Sammons, Yokohama.]

Milk is handled in Japan in much the same way as in the United States, the bottles having much smaller necks. Ordinary corks are used. The following prices per 100 milk bottles in Japan, with embossed marks as desired, indicate the possibility of introducing paper bottles: 1 go (0.4 pint), \$1.55; 2 gos (0.8 pint), \$2.80; and 4 gos (1.6 pints), \$5.50.

Japan enjoys quite a good export trade in bottles, principally beer bottles which are shipped to South America, aggregating 1,868,282 dozen, worth \$210,538 in 1909; 2,716,486 dozen, worth \$301,368, in 1910; and 3,677,180 dozen, worth \$382,897, in 1911. In the absence of any authentic statistics covering the production of bottles in Japan, these figures afford some idea of the size of the business.

As the Japanese are thrifty, there would seem to be prospect of a good market for paper bottles both from an economical and sanitary point of view.

Consul Edwin N. Gunsaulus states that hundreds of small houses are being built in Johannesburg, South Africa, estate agents and building societies having interested many people in owning their homes, for which they pay in monthly installments.

MILK SUPPLY IN SPANISH CAPITAL.

[From Consul Charles L. Hoover, Madrid.]

Owing to the present system of milk distribution in Madrid there would be but little sale for improved American containers until conditions change radically. There are no really large dairying concerns in Madrid. Part of the milk supply comes from goats and a few cows pastured near the city and kept in "lecherias" in the city, where they are milked; some is brought in from near-by farms, usually about 6 gallons in tin cans in straw baskets slung across a horse upon which the rider mounts; some from neighboring villages by train or wagon, all in tin cans; and a small amount from northern Spain by train—a 24-hour trip. Deliveries to regular patrons are made by "mozas" carrying a frame from which are suspended about 18 small pails or bottles, each holding about a quart, but it is probable that most of the families in Madrid do not receive regular supplies, such as is needed being brought in by some member of the family or a servant, who carries any convenient vessel or a pitcher from the house. This milk is secured from small milk shops, called "lecherias," of which there are about 550 shown in the city directory. The milk is always boiled as soon as it is brought into the house. It costs about 18 cents per quart. Most of the butter used in the city comes from France and costs about 60 cents per pound. It is almost impossible to secure cream and it is almost invariably sour when obtained.

WATER IN CANNED TOMATOES.

[From the California Fruit Grower.]

The canned-goods trade is beginning to speculate as to what will be the result of the Government ruling with regard to canned tomatoes. The decision reached by the pure-food board some months ago forbids the addition of water and of any more of the juice of the tomato than is just necessary to properly process it. It is of course impossible to prepare tomatoes without some liquid.

It is agreed that the effect which this new regulation will have will be the standard of the pack will be raised by the elimination of a large percentage of the inferior grade called seconds and off-standards, and this will probably reduce the pack somewhat.

Growers' prices, it seems, are improved by the situation. Only those packers who have been putting out an inferior article will be injured by the Government ruling; the trade as a whole will be benefited because improvement in the pack is certain to bring about an increase in the consumption of canned tomatoes.

TRAVELING POST OFFICE IN RHODESIA.

[From the London Times.]

From March 1 last, a traveling post-office van has been attached to the Rhodesian mail and from the Rhodesian border, making the six or seven hours' stop at Buluwayo, while the local mails are being re-sorted, unnecessary, and allowing of a corresponding decrease in running time between Cape Town and the Rhodesian capital. It is proposed shortly to run a Rhodesia limited mail every Tuesday upon the arrival of the overseas mail at Cape Town dock, following the practice which has for some time been usual between Cape Town and Pretoria. The return journey will be similarly timed, and the outward mail will be delivered to the home-going steamship. The new traveling post office was built at the Rhodesian Railway works at Umtali, and contains sleeping accommodation.

Guayule shipments from Mexico during the four months ended October, 1911, aggregated in value \$1,299,000 gold, against \$2,077,000 in the same period of 1910.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8764. Railway material.**—An American consular officer reports that a foreign Government will soon hold an adjudication for 40,000 tons of standard-size rails to be purchased for local railways. It is understood that the Government will receive bids from interested manufacturers for some time. The consular officer expresses a hope that American concerns will not fail to bid for these supplies, as further contracts for rails are in sight. Copies of the specifications and drawings relating to this adjudication can be obtained from the Bureau of Manufactures.
- No. 8765. Amyl acetate.**—A report from an American consular officer in the United Kingdom states that a request has been received from a local business firm for the names of American manufacturers of amyl acetate. The concern states that it uses about 1 hundredweight per week.
- No. 8766. Motor cars suitable for the Tropics.**—A Government official in a foreign country has informed an American consulate that he desires to receive particulars concerning motor cars suitable for the Tropics. He particularly desires information regarding medium-priced cars. Correspondence with this official may be in English.
- No. 8767. Safety-razor stropping attachment.**—An American consular officer in the United Kingdom reports that an inquiry has been received from a publishing house in his district for the names of manufacturers of safety razor stropping attachments. This firm states it is particularly interested in the "Twinplex" make.
- No. 8768. Harbor shelter for lighters and pier extension.**—A telegram has been received from an American minister relative to bids for the construction of a harbor shelter for lighters and extension of a pier in the country in which he is located. Firms that desire to submit bids for this work, which approximates a valuation of \$350,000, are required to register their names and references before June 25, 1912, with a special committee in charge of this matter. The minister adds that he has mailed notices of the proposed awards, and these will be loaned to interested firms by the Bureau of Manufactures when they are received.
- No. 8769. Motor cars and upholstered furniture.**—An American consular officer requests catalogues from the manufacturers in the United States of the very finest motor cars. These catalogues should show details of the cars, especially the interior upholstery and fittings. A car was recently purchased by a resident of his district for \$8,000, and at the present time it is the best machine in the market, but other residents are desirous of securing a better car, and American manufacturers should take advantage of this opportunity. The price of the car will be no object. Catalogues are also desired from manufacturers of upholstered furniture.
- No. 8770. Concession for electric tramways.**—An American consular officer calls attention to an adjudication which has been opened for a system of electric tramways for a certain Asiatic city, including several important suburbs. Bids will be received until June 15, 1912, and American contractors having the proper financial backing are urged to consider this concession. Copy of the conditions of contract, etc., can be obtained from the Bureau of Manufactures.
- No. 8771. Water supply.**—The municipality of Saarburg, Germany, will receive tenders for work on its water supply, the estimated cost of which will be about \$300,000. Specifications, particulars, conditions of contract, etc., may be obtained of the Burgermeister.
- No. 8772. Fire apparatus and dredger.**—The Minister of Justice and Home Affairs, Rio de Janeiro, Brazil, will receive tenders for motor fire engines, fire alarms, fire extinguishing appliances, etc., at a cost of about \$40,000; also for a dredger at an estimated cost of \$110,000.

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WORLD RAILWAY DEVELOPMENT.

RAILWAYS IN BRITISH COLUMBIA.

[From Consul General David F. Wilber, Vancouver, Canada.]

One of the greatest handicaps to British Columbian development has been limited transportation facilities, a problem that has been under serious consideration by the provincial and Dominion governments.

The principal lines of railway in British Columbia are: The Canadian Pacific Railway and subsidiary lines, owning vessels for coast-wise traffic; the Grand Trunk Pacific Railway, which also has a coast-wise fleet; the Canadian Northern Pacific Railway; and the Great Northern Railway and its subsidiary lines. All these, upon completion, will be transcontinental roads, the first and last of which are operating transcontinental service. The other two will be completed from coast to coast by 1914. Besides these, the British Columbia Electric Railway is engaged in interurban passenger traffic and freight transportation in the vicinity of Vancouver, serving nearly one-half the population of the Province.

The Government policy may be said to be the granting of subsidies and debenture guaranties to railways for constructing certain extensions that will open up regions now inaccessible and bind the Provinces together. These extensions as feeders for the main lines will, in time, probably prove valuable, but were it not for the expenditure to be made by the Province they could not be profitably built or operated for some time.

It should not be assumed that this railway policy and the projected lines mentioned in this report are to be consummated in the near future. Certain of the lines probably will be; others may, and still others will probably not be undertaken for several years. Before completion of all the lines there may be some changes in plans, based upon the interests of the different regions affected. At present, however, the extensions mentioned herein are the Government plans and those of the railway companies interested.

CANADIAN PACIFIC RAILWAY.

The extensions to be carried out by the Canadian Pacific Railway will provide it, when a few further extensions are made, with a second

line across two-thirds of the southern part of the Province and will give it a line along the whole eastern coast of Vancouver Island.

Mainland Lines and Branches.

The new mainland line will run from Hope, on main line 89 miles east of Vancouver, to that part of the Alberta division which enters British Columbia near Crows Nest. This will be bound to the northern line by four cross lines. The new sections are the Kootenay Central Railway, several small branches, including the Kaslo & Slocan Railway, the Shuswap & Okanagan Railway, and the Kettle Valley Railway.

(a) The first mentioned will connect Golden on northern line, with Fort Steele, Jukeson, Elko, and Fernie, on southern, and is assisted by a Dominion subsidy. (b) The Shuswap and Okanagan diverges from the northern lines at Sicamous, running to Armstrong, Vernon, and Kelowna, where it will connect with the Kettle Valley Railway by a boat service until completion of the extension to Penticton. (c) Between this cross line and the Kootenay Central will be one from Revelstoke via Arrow Lakes, or via Upper Arrow Lake, the Kaslo & Slocan Railway, and Kootenay Lake, for service upon which a \$160,000 vessel is being built. [See Daily Consular and Trade Reports of April 12, 1912.] (d) The other and most western cross line will be effected by extension of the Nicola branch, connecting Spences Bridge and Merritt to nearest point on the Kettle Valley Railway.

Crows Nest Pass and Kettle Valley Lines.

The Crows Nest Pass division, the Columbia & Western and boat services (operated by the Canadian Pacific between the Crows Nest Pass division and Midway), and the Kettle Valley Railway, from Midway via Carmi, Penticton, Summerland, and Princeton to Hope, will constitute the southern line. The Kettle Valley Railway from Midway to Coldwater is provided for by a \$5,000 a mile subsidy. It is generally understood to be controlled by or allied to the Canadian Pacific Railway and is so regarded in this report, although it is outwardly an independent line. The new railway policy provides approximately \$500,000 (\$10,000 a mile) for carrying the road from Coldwater over the mountains 50 miles to Hope, where a bridge, for which the new agreements with the Province provide a grant of \$200,000, will span the Fraser. This will give direct and unbroken railway connection from Vancouver to Proctor (22 miles east of Nelson). From Midway east to Nelson and Proctor there is a line in operation, as well as a line from Kootenay Landing, via Creston and Cranbrook, to Fernie. The only existing gap in the eastern section and the only one in the southern line provided for by the new policy will be on Kootenay Lake between Proctor and Kootenay Landing. These towns will, however, be connected by boat service and, it is presumed, will have rail connection before many years, but not in the immediate future.

The new railway policy, besides providing \$500,000 for the Kettle Valley line and \$200,000 for the Fraser River bridge (for which the Dominion gives a further subsidy), requires 145 miles' extension into the Okanagan by absorption of the Shuswap & Okanagan Railway by the Canadian Pacific Railway, linking Sicamous, Grand Prairie, Enderby, Armstrong, Vernon, Kelowna, and Penticton; 51 miles of line from Sicamous to Okanagan Lake have long been built and operated by the Canadian Pacific Railway. Absorption of the Kaslo & Slocan Railway by the Canadian Pacific Railway is provided for. It is to be entirely reconstructed and changed to a standard-

gauge road at a cost of \$500,000, of which the Province will provide \$100,000. Further, the Province repurchases certain lands ceded to the British Columbia Southern and Columbia & Western Railways (now absorbed by the Canadian Pacific) at an expense of about \$1,000,000.

The Vancouver Island Division.

On Vancouver Island, the Esquimalt & Northern is to be leased to the Canadian Pacific Railway and becomes a part of the system, to be known as the island division. The Esquimalt & Northern is already completed to Alberni and Port Alberni. It follows the eastern coast to Nanoose, whence it runs across the island to Barclay Sound. The new railway policy provides for building this line up the eastern coast from Nanoose to Courtenay (3 miles north of Comox) before the end of 1915. The railroad will undertake this extension at once. It is stated that, although the railway agreement does not compel it to do so, the Canadian Pacific ultimately will extend the Esquimalt & Northern up the whole length of the eastern coast of Vancouver Island to Hardy Bay, providing for a ferry at Seymour Narrows (about halfway between Vancouver and Hardy Bay) to connect with a projected line on the mainland to Fort George.

With regard to the Esquimalt & Northern, I have previously reported that the Canadian Pacific is providing for oil-burning locomotives and for the erection of oil tanks at Esquimalt. Storage tanks will probably be built at other points along this line.

Other Plans and Improvements.

Oil-burning locomotives are to be used on the mainland line from Field to Kamloops. I have also reported that the Rossland branch and possibly certain mountain sections of the Canadian Pacific are likely to be electrified; that train dispatching is soon to be done by telephone instead of telegraph; and that considerable expenditures will be made in and about Vancouver.

To double track the entire mountain section as far east as Calgary is one undertaking that the Canadian Pacific Railway management is reported to be arranging for at present. The work is to be carried out by the summer of 1915 in order to enable the Canadian Pacific to meet all competition that will arise in connection with the western grain shipments and other traffic expected to follow the Panama Canal opening.

The railroad shops are, according to present advices, to be at Coquitlam, 17 miles east of Vancouver and 40 odd miles up Fraser River. With announcement of the railway's plans for its shops, sidings, etc., speculation in real estate there became keen. Real-estate dealers have flooded the country with announcements as to the marvelous developments to occur, but it should be noted that the Canadian Pacific Railway has not promised and is not likely to do as much there as many who are purchasing lots probably believe. The town is rather too far up the Fraser River to become much of a seaport, not to mention the difficulty in connection with the bar at mouth of the Fraser. They merely intend to establish in time shops and train-handling facilities near Vancouver, where land could be purchased more cheaply.

Harbors and Shipping Facilities.

Port Moody, on Burrard Inlet, 5 miles nearer than Coquitlam to Vancouver and much more accessible for deep-sea vessels, has failed to attract seagoing ships. With an eye to the future, the Canadian Pacific has laid route plans before the Dominion authorities for a branch line along the north shore of the inlet to North Vancouver. Its plans are before the Dominion Railway Commission for approval. As the Canadian Pacific controls nine-tenths of the wharfage in Vancouver, with an extension of its lines to North Vancouver, it will have ample shipping facilities in Burrard Inlet close to the gulf for the future. The railway ultimately will be built through North Vancouver and extended up the coast for a connection by ferry, or otherwise, with its Vancouver Island lines.

It is probably unlikely that Port Mann, Coquitlam or New Westminster will ever attract any considerable amount of shipping, for the reasons given.

The Canadian Pacific is to spend \$2,000,000 in this city, extending Hotel Vancouver, increasing its yard trackage, and building a new passenger station, some of the work to be undertaken this year. The company is adding a number of vessels to its coastwise fleet and providing better coastwise service. It has ordered two new vessels for its trans-Pacific traffic which will not be completed this year.

GRAND TRUNK PACIFIC RAILWAY.

The main Grand Trunk Pacific Railway, to run through central British Columbia via Yellowhead Pass, Tete Juan Cache, Fort George, and Hazelton to Prince Rupert, is being constructed rapidly. The track is laid eastward from Prince Rupert about 164 miles, and the line is built westward from Yellowhead Pass to Tete Juan Cache, the expenditures being upward of \$20,000,000. The company expects the road to be completed to Prince Rupert next year. This line is being assisted by the Dominion Government. A 150-mile branch line is projected from Hazelton to Groundhog coal basin.

The railway policy of the provincial government provides for a 450-mile railway from Vancouver to Fort George, via North Vancouver, Howe Sound, the Squamish River, Lilloet, and the Fraser River, construction on the southern end to be started before July 1. Most of the route has not been surveyed and, therefore, not definitely outlined. Over this Pacific Great Eastern Railway the Grand Trunk Pacific is to have running rights and first option of purchase. Timothy Foley (St. Paul, Minn.), Patrick Welch (Spokane, Wash.), John Stewart and Donald McLeod (Vancouver), D'Arcy Tate (Winnipeg), and Vernon Smith (Hazelton) are the persons interested in construction of the Grand Trunk Pacific Railway. The provincial government guarantees the company's bonds to the extent of \$35,000 a mile. This company is expected to absorb the 10 miles or more of road already built by the Howe Sound & Pemberton Meadows Railway at head of Howe Sound. The road will enter Vancouver by the proposed Second Narrows Bridge.

BRITISH COLUMBIA & ALASKA RAILWAY.

The British Columbia & Alaska Railway is expected to abandon its provincial charter for a line between Vancouver and Fort George,

according to latest reports, and concentrate its attention upon financing and constructing a line from Fort George through the coal fields of upper Pine River to the agricultural areas of Peace River region and thence on to Edmonton.

VANCOUVER, WESTMINSTER & YUKON RAILWAY.

The Vancouver, Westminster & Yukon Railway has a charter to build from New Westminster through Vancouver, across the projected Second Narrows Bridge, through North Vancouver, up the mainland coast and into Yukon Territory. It built a line from New Westminster to Vancouver, but this section, which is the only part constructed, was sold to the Victoria, Vancouver & Eastern (Great Northern system) and is the latter's main line link between here and New Westminster on its branch running to Everett from Vancouver. As a result, the Vancouver, Westminster & Yukon is, at present, only a railway on paper and has no plans for any early construction.

CANADIAN NORTHERN PACIFIC RAILWAY.

The provincial government guarantees bonds up to \$35,000 a mile and the Dominion Government subsidizes at \$12,000 a mile construction of the 525 miles of the Canadian Northern Pacific Railway from Yellowstone Pass to Vancouver, which is now building and must be completed within 4 years. This line will run southward from Tete Juans Cache (west of Yellowhead Pass) along Thompson and Fraser Rivers. It will go through Kamloops, Ashcroft, Hope, Chilliwack, and Port Mann.

Port Mann will be to the Canadian Northern Pacific what Coquitlam will be to the Canadian Pacific. Lots in the town are being exploited with energy. It is unlikely that all the predictions made by real-estate men as to Coquitlam will come to pass. It is hardly to be doubted that, although the Canadian Northern Pacific will have shops and works at Port Mann, it will eventually require a tide-water terminal for passengers and freight closer to the sea than Port Mann.

In fact it has been reported that, from a point a few miles east of Port Mann, the Canadian Northern Pacific will cross via Douglas Island to the northern bank of Fraser River and build along the north shore, over the mouth of Coquitlam River, into Fraser Mills. Track construction will end there, but the railway has secured running rights over the Great Northern into Vancouver and it will share terminals that the Great Northern Railway is establishing in Vancouver. I understand, however, that although this route may be used and may even be under consideration, no decision has been reached by the company. It is likely that this matter will not be determined for some time.

Steady Construction Work.

Grading is being done along the Fraser and Thompson Rivers, some rail is being laid, and, generally, construction work is being pushed. A strike has brought work to a standstill on this portion of the main line, but it is not likely to continue long. Unless many difficulties are met with, it is expected that the roadbed of the Canadian Northern Pacific in British Columbia will be practically complete before the end of 1913. Six thousand men are employed on the company's

British Columbia construction work and the monthly expenditure is about \$1,000,000. The road is built westward to a point about 150 miles east of Yellowhead Pass. If the company's expectations are fulfilled, the main line will be completed within two years—certainly not later than the beginning of 1915.

Feeders and Hydroelectric Power.

The Canadian Northern Pacific, as well as the Canadian Pacific, is to have a feeder extending into the Okanogan region 150 miles long, with a provincial guarantee of bonds of \$35,000 a mile. Mackenzie & Mann, who control the Canadian Northern Pacific Railway, last year purchased the rights and property of the Coteau Power Co., whose charter provides for a hydroelectric plant at Shuswap Falls, north of Vernon, near Lumby. The power was to be used for an electric railway running north and south through the Okanogan Valley district as well as the supplying of light and power to cities along the right of way. From requirement of the new provincial policy, it appears that the Coteau Power Co. and the Canadian Northern Pacific feeder are to be closely allied in the Okanogan. This branch will leave the main line near Kamloops, on North Thompson River, and will run southeast, crossing the Shuswap and Okanogan (the Canadian Pacific branch above mentioned) at or near Armstrong and thence southerly to Vernon, along Long Lake and across a low summit to Kelowna on the eastern shore of Okanogan Lake, with a branch from Vernon to Lumby.

It was recently reported, also, that the Canadian Northern is to build a 90-mile line from Stewart up Bear Valley to the Groundhog coal fields, to which it is understood the Grand Trunk Pacific Railway is to build a 150-mile line northward from Hazelton.

Vancouver Island Extensions.

Under the new railway policy of the Province, the Canadian Northern Pacific Railway must build, within three years, 150 miles northward from the 100-mile post on its Barclay Sound extension on Vancouver Island. The line under construction skirts the southern coast west of Victoria and then runs northward through the central portion of the island by way of Cowichan Lake toward Barclay Sound. The section now provided for will start west of Cowichan Lake, through Port Alberni, Alberni, and Cumberland northward to the east coast at or about Seymour Narrows, where the Canadian Pacific, as noted, plans to cross by ferry when its mainland line from the coast to Fort George is undertaken. The Canadian Northern Pacific also plans for a line, branching westward about 40 miles north of Cumberland, that will swing through Strathcona Park (which is to be the Yellowstone Park of British Columbia) and the north central part of Vancouver Island in a wide detour to Hardy Bay. This branch will not be built for several years. The section now assured, from Cowichan Lake northward toward Cumberland, is to receive aid from the provincial government by a bond guaranty of \$35,000 a mile.

GREAT NORTHERN RAILWAY.

A branch of the Great Northern Railway runs from Everett to Vancouver, northward along Puget Sound shore. Its Nelson and

Fort Sheppard branch runs northward to Nelson, and the Spokane Falls & Northern division taps British Columbia at Laurier and Chapaca.

The Victoria, Vancouver & Eastern Railway is a subsidiary of the Great Northern. Its original charter provided for a line from Cascade to Vancouver via Grand Forks, Phoenix, Midway, Fairview, Princeton (over the Hope Mountains), Hope, and Fraser River Valley. The line would have been entirely within British Columbia. This plan has not been adhered to fully. The line was started at Laurier, in Washington at the border (connecting with the Spokane Falls & Northern division of the Great Northern Railway), running west in British Columbia along the south side of Kettle River (with a branch to Grand Forks and Phoenix), ending at the international boundary line, where the Great Northern rails in the State of Washington via Danville, Curlew, and Ferry are used. In this way a route via the river valley level in the United States is obtained instead of a passage over the hills in Canada. The route runs from Danville to Midway, entering Canada again, westward from Midway in Canada to Bridesville, thence into the United States again to a connection with another branch of the Great Northern at Oroville, thence toward British Columbia again, entering at Chopaca and running northwesterly via the Similkameen Valley to Princeton and Coalmont, the present terminus.

The Kettle Valley Controversy.

The road is being constructed with Vancouver as its objective terminal. From Princeton and Coalmont its route must closely parallel the Kettle Valley and Canadian Pacific lines. Under the new agreement between the Province and the Kettle Valley Railway, and by virtue of its power under its Dominion charter, the Great Northern will have a right to use the rails of the Kettle Valley road to cross Hope Mountains; and it will come down toward the coast over rails of the Canadian Northern Pacific to a junction with its own line, from Everett to Vancouver, now in operation.

Should the Great Northern accept this opportunity, the 50 miles of road provided for by the new provincial railway policy between Coldwater Junction and Hope will bring two new railway lines from the boundary region of British Columbia to the coast.

It is reported, however, that the Great Northern, or its subsidiary, will protest the Kettle River Valley agreement, claiming that the Great Northern is ready to build at once and that its plans, which with surveys are stated to represent an investment of over \$100,000, were the first filed with the Dominion Railway Commission. It would appear that, if a protest is really made, it will be based on the fact that the proposed line of the Kettle Valley Road will lie along the same route, in whole or part, planned by the Great Northern.

It is regarded as likely that the railway commission will require building of at least a 26-mile section jointly by the Victoria, Vancouver & Eastern and Kettle Valley lines down the grade on the Coquahulla River, which would result in a saving, it is said, of \$1,000,000.

West of the Hope Mountains, a line between Abbotsford and Millers Landing, in the Fraser River Valley, is nearly completed.

Union Station Arrangements.

Under an agreement with the city of Vancouver, concluded during the past winter, the Great Northern Railway is to build a large passenger station on the north shore of False Creek in this city several blocks to the eastward of its present station, which is on land owned by other interests and must soon be vacated. Instead of approaching the peninsula—upon which is the business region of Vancouver—over a bridge, the road is to carry out an extensive reclamation scheme about the east end of False Creek and will run along the shore into the new station on the north side. This station is to be a union depot available to any road desiring to use it. The Canadian Northern Pacific will be one of the roads to do so.

The reclamation scheme will afford a large area to the Great Northern for freight yards and sidings. A spur is to run through the eastern part of the city to the large dock for deep-sea vessels on Burrard Inlet, now being built by this railroad with other interests. It has been rumored that on the completion of the dock the *Minnesota*, of the Great Northern trans-Pacific service, will make regular calls at Vancouver. The whole scheme is to involve an expenditure of several million dollars in the course of a few years. Work has already begun on the reclamation and the docks.

AMERICAN RAILWAY BRANCHES TO BRITISH COLUMBIA.

The recent purchase of the Bellingham Bay & British Columbia Railway from the estates of D. O. Mills and P. B. Cornwall has led to a belief in British Columbia that the Chicago, Milwaukee & Puget Sound, or the Union Pacific, intend to use it as a link in a branch to Vancouver. It is claimed that the line will parallel the Canadian Pacific into North Vancouver and that an area for large terminals has already been secured at Roche Point in that city. No definite information has apparently been given to substantiate or contradict these rumors. Other reports have it that the Union Pacific is to build an entirely distinct and new line into Vancouver.

The provincial government is considering the question of aid to the Idaho & Northern Washington Railway for a 27-mile extension from the international boundary to Trail. Construction crews of this road are already north of Metalline, Wash., in the Pend d'Oreille Valley. Its present terminus is Metalline. The projected extension to Trail would tap a mining and agricultural region.

INTERURBAN ELECTRIC LINES.

The British Columbia Electric Railway not only holds the franchises for city car lines in Vancouver and its suburbs, including North Vancouver, Point Grey, and South Vancouver, in New Westminster and in Victoria, but it operates, also, several interurban lines. Those on the mainland connect Vancouver with New Westminster and Chilliwack, about 80 miles from Vancouver on the Fraser River. This company and its subsidiary, the Vancouver Power Co., have supplied electrical current for light and power over most of the region in and about Vancouver. In all of these lines it has had practically no competition up to recently, when the Western Canada Power Co. completed its power plant and transmission lines.

With this new competition, it is regarded as certain that several electric lines tapping agricultural lands near Vancouver will be built at an early date. In reports the desire of the Western Canada Power Co. for the organization of a system of electric railways for which it shall provide power is evident.

Line to Mission City.

The plans for one of these lines have been laid before the Dominion Railway Commission but will not, I understand, be approved in their entirety until more satisfactory plans for the terminals are completed. The concern which is to establish the road is termed the Burrard, Westminster, Boundary Railway & Navigation Co.; president, Wm. McNeil, of Vancouver, who is vice president of the Western Canada Power Co. The first section, to be built at once, will connect Westminster Junction and Mission City. Later, connections will be made with Port Moody, New Westminster, and Vancouver. Pitt River must be bridged, for which it is understood an estimate of \$750,000 is made. The provincial government will probably be asked to cooperate in building the bridge. The road will be over 40 miles long and will tap a fertile region.

Line to Ladner.

The delta region, southeast of Vancouver and immediately south of the Fraser River, is also a fertile agricultural section. Last year there were over \$1,000,000 of agricultural products of excellent quality. Direct electric railway connection with this region may lower the high price of provisions in Vancouver. The British Columbia Electric Railway has not, however, acceded to the desire of the delta for a tram line to Ladner post office. Incidental to establishing such a line is the expensive task of spanning Fraser River. Two plans are under consideration—one to connect the delta with New Westminster, which would make the region somewhat more accessible even to Vancouver; and the other to build directly to Vancouver which would make a much larger market available and serve Lulu Island and Sea Island as well. The latter plan would be much more expensive, but of far greater benefit, and, if the municipalities of South Vancouver and Richmond muster sufficient support, will probably be the one adopted. Such a plan would link up well with the British Columbia Electric Railway's system and this company appears now, since interests allied with the Western Canada Power Co. have shown desire to build and own such a road, to be much more anxious than formerly to build it themselves. There appears, therefore, to be every prospect of a line being built before long, to the great benefit of this part of the Province.

The International Railway & Development Co. of which H. T. Thrift, of Hazelmere, is reported to be secretary, and which is said to be composed of Vancouver business men, plans to construct a large power plant northeast of Vancouver, capable of generating several hundred thousand horsepower, and an electric railway connecting the municipalities of the delta, Surrey, Matsqui, Langley, and Sumas. Eventually the line will be extended to Bellingham and Seattle, if the promoters meet with success. It is stated that nearly \$1,000,000 is already available and banked by the company.

Continuation to Boundary Line—Problems Involved.

If the British Columbia Electric Railway builds to the delta, it is not unlikely that it will continue to the boundary of the United States. There have been persistent reports regarding the sale of the old right of way of the Great Northern Railway near Blaine. It is in the region south of the Canadian Pacific and west of Agassiz that over half the population of the Province resides, and the development of this section has been rapid. There is a greater need for transportation facilities in consequence, and the projected lines, it is thought, should prove profitable.

With regard to the British Columbia Electric Railway's activities, it should be noted that it has been obliged to spend large sums for city street lines—a number of which will not be very profitable for a time—has had to make large additions to its plant and rolling stock, and is involved with the municipalities of Vancouver, Point Grey, and South Vancouver over the problems of unifying its franchises and satisfactory tram fares. Hope is expressed that, as these problems will be taken up soon at the head office of the company in London by Premier McBride on behalf of the Province and cities, some agreement will soon be effected, giving the company a more definite footing and giving it more assurance in extending its lines. As pointed out in Daily Consular and Trade Reports for April 12, 1912, its plans for this year involve expenditure of several million dollars, principally for urban systems and exclusive improvements in and about Victoria.

SUMMARY OF PROVINCIAL POLICY.

To summarize the provincial government's railway policy:

Canadian Pacific Railway.

Provision is made for extension of the Esquimalt & Northern to Comox. The Government agrees to repurchase 2,500,000 acres of lands granted to the Columbia & Western and British Columbia Southern Railways at 40 cents an acre, amounting to \$1,000,000. A bill provides for repair and operation of Kaslo and Slocan line as a standard-gauge line.

Grand Trunk Pacific Railway.

Guarantee of bonds to the extent of \$35,000 a mile to Foley, Welch & Stewart for a line from North Vancouver, via Howe Sound and Pemberton Meadows to Fort George, with ultimate extension to Peace River; connection with Vancouver over Second Narrows Bridge.

Canadian Northern Pacific Railway.

Canadian Northern Pacific bonds are guaranteed for a line from Kamloops to Vernon, with a branch to Lumby. Canadian Northern Pacific bonds are, also, guaranteed for an extension of Victoria-Barclay Sound line to Strathcona Park. This policy requires the expenditure of about \$1,850,000 of provincial funds and the guaranteeing of not more than \$25,000,000 of bonds to secure construction of 800 miles of railroads. In the agreements provisions are stated to have been made for a "fair-wage" clause and for employment of white labor exclusively.

It has been suggested by the attorney general that the provincial railway policy has as one of its purposes clothing the provincial gov-

ernment with authority to fix railway rates to a certain extent within the Province and without reference to rates elsewhere in Canada, if it should ever become necessary to do so.

SUMMARY OF DOMINION POLICY.

The railway bill brought down by the Dominion Government in March gives an indication of the railway policy of the Dominion for this Province, which the provincial policy aims to complement. It provides in part for:

Extensive Renewals.

To the Vancouver, Westminster & Yukon Railway, from Vancouver northerly 100 miles; to the Kootenay Central Railway, from Golden to a point on the British Columbia Southern near Jukeson, 175 miles, and from Caithness toward the international boundary, 25 miles; to the Kettle Valley Railway, from Grand Forks up the north fork, 50 miles; to the Esquimalt & Nanaimo Railway, from Wellington to Alberni, 60 miles, from McBride Junction to Sandwich, 45 miles, and from Sandwich to Campbell River, 38 miles, in all 143 miles; for a line from Esquimalt & Nanaimo Railway near Campbell River toward Fort George on the Grand Trunk Pacific, 100 miles.

General Subsidies.

To the Burrard Inlet Tunnel & Bridge Co., (a) from Eburne to Seymour Creek, (b) from Seymour Creek to Deep Cove, 5 miles; (c) from Seymour Creek to Horseshoe Bay, 14 miles; (d) from Pender Street, Vancouver, to North Vancouver, 3 miles; to the Grand Trunk Pacific Railway, from Harte to Brandon, 25 miles; to the Cariboo, Barkerville & Willow River Railway, from a point on the Grand Trunk Pacific near Barkerville, 87 miles; to the Naas & Skeena River Railway, from Nasoga Gulf to Ground Hog Mountain, 100 miles; to the Kettle Valley Railway, from Penticton to a point on the international boundary, 50 miles; to Calgary & Fernie Railway, from Calgary to Fernie, 100 miles.

Bridge Subsidies.

To the Vancouver, Westminster & Yukon Railway, for a bridge across Burrard Inlet, not exceeding \$500,000; to the Kettle Valley Railway, for a bridge over the Fraser River near Hope, not exceeding \$250,000; to the Cariboo, Barkerville & Willow River Railway, for 20 bridges over the Willow River, not exceeding \$95,000.

The Canadian Northern Pacific gets \$12,000 per mile for a line 525 miles long, from the Yellowhead Pass to Vancouver.

BENEFITS TO ACCRUE FROM NEW RAILWAYS.

In his speech supporting the new railway policy before the provincial parliament on February 21 last, Premier McBride drew this summary of the railway situation:

I should like to direct the attention of the House to the very striking evidence of the part played by late railway construction in the development of the Province. In 1904 there were, in British Columbia, but 1,650 miles of standard roads. In 1912 the mileage, constructed or assured, is not less than 2,435 miles—built or under contract. If we add to this the 845 miles in addition which are provided for by the policy of the Government embraced and expressed in these bills, we have the result of constructed and assured railways in British Columbia of over 3,000 miles of standard road, as against but 1,650 a few years ago. Included in the approximate total I count this Vancouver and Fort George line, with an estimated length of 450 miles.

Needless to say the expenditure of \$50,000 for labor and materials will contribute toward the prosperity of the Province. Vancouver is in the market for much of the materials and supplies. It is also the outfitting point for a considerable portion of the railway laborers. Vancouver merchants feel that they have reason to expect that 1912 will be a very good year.

Those railway projects will serve to put Vancouver and Victoria in touch with all British Columbia. The Grand Trunk Pacific Railway will make Prince Rupert an important point. Vancouver business men desire this city to be the jobbing center for the Province, north and south, and do not wish to be displaced by any city east of the mountains. Great expectations are based on the development of "the hinterland" (very sparsely settled yet) as a result of the provision of better railway facilities. The fact that the section near the boundary has been more accessible to cities in Washington than to Vancouver has long been a source of dissatisfaction to the citizens of the Province, particularly those in Vancouver. It is evident that the new railway policy seeks to correct this condition. The Premier, in his speech before the provincial parliament, referred to this problem, as follows:

In these times, with the completion of the Panama Canal in sight, and the generally rapid development that is taking place through western America, we can not afford to prolong the policy of waiting. We must be in a position to take advantage of the opportunities which are presenting themselves. The conditions of the times do not brook longer delay, and we have come to the conclusion that it will be good business for us to bring the Kootenay district into close touch with Victoria, Vancouver, and New Westminster, so as to secure, preserve, and protect for the benefit of our own people the trade of the various sections of our Province, and prevent the diversion to the country south of the line of this business which belongs by right to British Columbia.

The Government and people of British Columbia realize that if the Province is to profit to the fullest extent, the arteries of commerce from the Pacific ports to the interior must be ampler and more numerous.

[Previous exhaustive reviews from Winnipeg of railway development in western Canada appeared in Daily Consular and Trade Reports for Apr. 7, July 3, and Aug. 7, 1911, and Feb. 26, 1912.]

NEW MONTREAL RAILROAD TERMINALS.

[From Consul General Wm. Harrison Bradley, Montreal, Canada.]

The most important event in real-estate and railway circles, and one which strengthened speculation in real estate on Montreal Island more than anything else, was the completion of plans of the Canadian Northern Railway for large terminal facilities in both the suburbs and city. The company has bought 4,000 acres north and west of Mount Royal, reaching from the mountain to where the Riviere des Prairies leaves the Lake of Two Mountains to form the northern boundary of Montreal Island. Along this right of way will be built shops, factories, and suburban towns. Mount Royal will be pierced by a double-track tunnel 3.3 miles in length, which will come out on the south side of the mountain in the center of the city near the present Windsor station of the Canadian Pacific Railway. Here a passenger station will be built somewhat on the lines of the new Pennsylvania Railway Station in New York, the line being also extended

toward the harbor on elevated tracks to a great projected freight depot, through which the railroad can load directly into its own ships. From the north entrance to the tunnel electricity will be the motive power. To accommodate the suburban traffic rapid trains will be run at frequent intervals. It is estimated that the total expenditure will be about \$25,000,000. Construction plans are being prepared and the company hopes to begin work soon.

It is of interest to note that McKenzie and Mann are said to have just raised the last money they will need (\$35,000,000) to complete their road from the Atlantic to the Pacific, over 7,000 miles of track.

LINES FOR QUEBEC PROVINCE.

[From Consul Frederick M. Ryder, Rimouski, Quebec.]

While there has been no railroad construction in this district during the past year, a number of provincial subsidies in land grants have been made for several new roads, the most extensive being a grant of 2,000 acres per mile for 190 miles to the Canada & Gulf Terminal Railway to continue the line from Matane to Gaspé Basin, passing through the interior of the peninsula of Gaspé, a total grant of 380,000 acres. There is some prospect of the Rimouski & Edmundston Railway being constructed in 1912; at least the promoters of the enterprise are sanguine of a beginning. Financial assistance has been tendered by foreign capitalists, the land grant from the Province (some 200,000 acres) being an inducement.

THE TRANS-PERSIAN RAILWAY.

[From Consul Stuart K. Lupton, Karachi, India.]

Mr. Johns, the chief engineer of the Oudh & Rohilkand Railway, with a corps of assistants, is making a preliminary survey of the country between Karachi and Guadur over which a part of the projected Trans-Persian Railway will be built if the Russian and British Governments can agree upon conditions. Mr. Johns informs me that this portion of the route presents few difficulties.

It seems to be settled that the northern portion of the line will be from Baku through Aliat and Astara to Yezd, but there is much uncertainty as to its further course. The two routes spoken of are from Yezd to Kerman and thence to Guadur, and from Yezd to Guadur by way of Bunder Abbas. Via Kerman the length of the line from Baku to Karachi is estimated at 1,994 miles, while the deflection to Bunder Abbas would increase the total to 2,056 miles.

Estimated Cost and Income.

The entire cost of the line from Aliat to Karachi is approximately estimated as follows:

	Via Kerman.	Via Bunder Abbas.
Aliat to Astara.....	\$6,652,505	\$6,652,505
Astara to Guadur.....	133,074,442	138,602,786
Guadur to Karachi.....	32,673,681	32,673,681
	172,400,628	177,928,972

The portion of the line from Guadur to Karachi would be coastal and almost unproductive. On the basis that the gross receipts would amount to \$8,547 per mile, except in certain portions of the coast section where they will be somewhat less, and that the working expenses would amount to 70 per cent of the gross receipts, the estimated net receipts are as follows:

	Via Kerman.	Via Bunder Abbas.
Gross receipts.....	\$16,991,433	\$17,262,526
Working expenses.....	11,894,001	12,083,764
Net receipts.....	5,097,432	5,178,762
Interest on capital.....	7,578,489	7,824,780
Annual deficit.....	2,481,057	2,646,018

It is hoped that this estimated deficit would be wiped out by subsidies from the Russian and Indian railways based on those allowed under the Indian branch railway terms, namely, amounts equal to the net earnings of interchange traffic.

Gauge Connections and Effect on Trade.

The chief point remaining to be settled seems to be as to where the break of gauge demanded by the British Government from the Russian gauge of 5 feet to the Indian of 5 feet 6 inches shall be. The Russian Government demands that this should be at the border of Baluchistan; the British Government, on the contrary, desires that it should be at the point where the line enters the British sphere of influence in Persia. Even if the British carry their point, it would seem that India will be largely cut off from participation in the trade of the so-called neutral zone of Persia.

The most noticeable effect of the proposed line at present evident in Karachi is a wildcat speculation in land situated in the northern portion of the city. Nothing definite is known as to the probable line of entrance, but there have been cases where land sold for two or three times the amount demanded for it two months ago.

RAILWAY BUILDING IN MESOPOTAMIA.

[From Consul Emil Sauer, Bagdad, Asiatic Turkey.]

Bagdad Tramway Concession.

The El Reyad, a local Bagdad paper, states that the Turkish Imperial Government has approved the concession granted by the municipality of Bagdad to Mr. Shabunder to build a tramway from Moazzem, 5 miles north of Bagdad, to Garara, about 5 or 6 miles south of Bagdad, and that Shabunder has left for Europe to contract for material and engineers. Such an undertaking, however, could not be carried out without widening a street through the city of Bagdad, which would be an expensive undertaking.

Electric Lights, Telephones and City Improvements.

The municipality of Bagdad has opened bids for installing an electric lighting plant, and the army post is considering introducing a telephone system all over the city. This will open here a limited market

for American electric lighting fixtures and telephone fixtures. The municipality has recently authorized a loan of \$132,000 to carry out city improvements, including the widening and paving of streets.

Construction of Railroad from Bagdad to Mosul.

The Bagdad Railroad Construction Co. has completed surveys for the railroad between Bagdad and Mosul and sent in the plans early in March. A large corps of engineers has been in Bagdad all winter (Meissner Pasha, chief engineer in charge) and expects to start construction work at Bagdad by June 1 next and build toward Mosul, whether the plans have been approved by that time or not. Three or more vessels will be put on the Tigris by the construction company to carry the supplies.

GERMAN LINE TO MESOPOTAMIA.

[From Consul Edward I. Nathan, Mersine, Asiatic Turkey.]

There has been considerable progress for the past year in construction of the Bagdad Railroad. This line, which commences at Konia, the terminus of the Anatolian Railroad, is to run to Bagdad, and when completed there will be through railroad communication from Constantinople to Bagdad. In 1911 a new section of 40 kilometers (kilometer=0.62 mile) from Ouloukishlou to Eregli was opened to traffic and about 80 kilometers of roadbed across the Adana Plain was constructed which will soon be in use. The work of tunneling the Taurus and Anti-Taurus Mountains was begun and in a few years the railroad will be open to Aleppo. This railroad is a German concession and the construction material is principally from Germany.

The company which has this concession is also furthering the irrigation of the country adjacent to its line and has already executed a plan for the irrigation of the district of Konia. Its engineers are now studying the feasibility of irrigating the plain of Adana to make it more productive. An aerial railway for the handling of cargo at the port of Mersine was also built by the Bagdad company which, however, seems to have abandoned its original intention of constructing harbor works at Mersine and is preferring the port of Alexandretta as its terminus for Syrian and Mesopotamian traffic.

RAILWAY BUILDING IN ASIA MINOR.

[From Consul General George Horton, Smyrna.]

Smyrna has communication with the interior of the country by two railway lines: The Smyrna-Cassaba prolongment railway, running inland eastward, for 324 miles, with branches of about 60 miles, and the Smyrna-Aidin Railway, running 234 miles due east inland in the southern section of Asia Minor, with branches amounting to 87 miles. Both these railway companies have started a further extension of their respective lines and work is in progress.

Constantinople to Smyrna in 12 hours.

The Smyrna-Cassaba Railway is extending the Smyrna branch (for 112 miles) northward to the port of Panderma on the Sea of Marmora. Work was commenced last year and its completion is announced for 1912. The trip from Smyrna to Constantinople by this line will be made in 12 hours, of which 8 by rail to Panderma

and 4 by steamer to Constantinople. This will effect a saving of 12 hours on the present sea trip and 36 hours on the present overland route, via Afion Karahissar on the same line. The saving of time which will therefore be effected through this new route, will be of the greatest benefit to Smyrna, as nearly all the passenger and mail traffic comes through Constantinople.

Smyrna-Aidin Extension.

The extension of the Smyrna-Aidin Railway from Dinair, its terminus, to Egherdir is being continued with great zeal. Unless adverse weather conditions and unforeseen engineering difficulties are encountered, the line will be completed in 1912. This extension will tap the most fertile part of Asia Minor, and the exploitation of rich forests and mines existing in those regions will be thus made possible.

Street Railways.

There are in Smyrna and suburbs about 12½ miles of street railway. The most conspicuous of these is the one that runs along the quay with its one-horse cars. It is entirely owned by a French company, and the cars are made in Smyrna. The other street car lines of the town are owned by the municipality or by a Belgian company. Some of these operate two-horse cars.

LINES IN THE CAUCASUS.

[From Vice Consul Frederic W. Cauldwell, Batum, Russia.]

Vladikavkaz Line Improvements.

The concession of the Vladikavkaz Railway Co., which expired in 1911, was renewed for 15 years. This line traverses the north Caucasus from Baku to Novorossisk and Rostoff-on-Don, and is the outlet for this rich agricultural district. With the renewal of the concession the railway company is to effect improvements. At Novorossisk the docking will be extended, and a new elevator is being built which will hold, it is estimated, 60,000 tons of grain. The railway already has at Novorossisk what is claimed to be one of the largest elevators in the world. The improvements at that port will afford housing for an enormous quantity of grain and alleviate such inconvenience as attended the large crops of 1910, when great quantities of grain were stored in the open and covered with tarpaulins.

Traffic over the Transcaucasian.

The report of the operation of the Transcaucasian Railway, which connects Batum with Baku on the Caspian Sea (558 miles), shows for first 8 months of 1911 the following figures: Number of trains run, 112,500; number of passengers carried, 5,639,325; goods by grande vitesse (express), 39,700 tons; by petite vitesse, 2,217,383 tons; 795,379 tons of railway material belonging to the line were carried.

The revenue derived from the passengers and goods amounted to \$9,983,042, an excess of \$754,900 over the corresponding period for 1910. The expenditure of the railway during the same period amounted to \$3,321,595, an excess of \$730,630 over the corresponding period of 1910.



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CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA.

[By A. H. Baldwin, Chief, Bureau of Manufactures.]

The Bureau of Manufactures has, by direct communications, already invited the attention of many commercial organizations to the significance of the establishment of a national chamber of commerce and has printed the tentative draft of by-laws of the association (Consular Reports of May 4, 1912).

The conference of April 22-23 was so completely representative in character, commercially and geographically, that its action may fairly command the interest of all local and special trade organizations. It seems unlikely that it would again be possible to launch a national commercial organization under conditions more favorable than were obtained at this meeting. No general locality and no important commercial interest lacked representation. This makes it reasonable to hope for the complete success of this movement to nationalize the general promotive commercial spirit of the country.

A study of the by-laws, which it is explained are really a broad outline of the basic principles of the organization rather than the completed scheme, indicates clearly the earnest effort on the part of those to whom the duty of preparing the plan was assigned to give fair representation and share in control to every association of standing in the United States.

The method of organization proposed, it is believed, will prevent selfish control of the national chamber by any geographical section or by any special commercial interest, as all questions which are to receive the support of the association must first be submitted to all the constituent members for approval and every trade body, through its selection of an advisory councilor, will be in direct communication with the national organization.

The wisdom of the conference in adopting at the beginning a somewhat flexible scheme is obvious, and this plan will permit a logical and sane evolution of the service of the chamber. The fundamental principles which are expressed in these by-laws received the practically unanimous assent of about 400 commercial organizations, both local

and national, and between 600 and 700 trained and representative business men from every section of the United States.

The board of directors is given wide discretion and is authorized to take such action with respect to the smaller organizations, in such details as annual dues and similar matters, as may seem fair to those trade bodies and to the national association. This desire to give adequate opportunity to all classes of commercial chambers to aid in the movement is made evident by a portion of Article V of the by-laws, as follows:

Members from cities of less than 50,000 population may be admitted by vote of the board of directors upon the payment of such dues as the board of directors shall fix.

The spirit which characterized this national commercial conference was so plainly earnest and fair that the cordial cooperation of the Government in the development of the service of the Chamber of Commerce of the United States of America is assured as long as its growth is dominated by this same spirit.

It is suggested that commercial organizations everywhere take formal action on this subject by appointing a "committee on the national chamber of commerce" in order that every association may give adequate consideration to this important movement.

CHANGES IN SWISS POSTAL SERVICE.

[From Consul General R. E. Mansfield, Zurich.]

From an income of \$11,664,875 in 1911 the Swiss Postal Department made a net profit of \$723,995, due to increased volume of business and economies in administration. The general commercial and industrial prosperity last year in Switzerland, the large tourist traffic, and free-postage restrictions caused heavier mails. Statistics follow, the increases over 1910 being shown in parentheses: Letters, 205,390,023 (13,663,494); foreign post cards, 116,801,715 (7,251,719); printed matter, 90,848,889 (8,377,973); newspapers, 185,771,649 (1,039,722); local post cards, 3,236,726 (174,425); post checks, 7,776,495 (1,226,388); reimbursements, 3,241,905 (196,435); parcels, 39,774,265 (2,022,281).

A new law which became effective in 1911, requiring all publications mailed for advertising or business purposes to pay the rate of postage prescribed for printed matter, instead of being classed as newspapers, increased the revenues of the service to considerable extent. There was a large increase in the number of parcels carried, but newspapers and periodicals show only a slight increase in number.

Stamping and canceling machines are being installed on trial, among which are some of American make.

In order to modify, simplify, and improve the service, four persons were selected last year from each of the different departments to constitute a committee to make recommendations for the adoption of new and improved methods of handling the mails.

The question of establishing a Federal savings bank is being seriously discussed, and plans for a law creating that branch of service have been submitted to the Postal Department for consideration and approval.

The great bazaar of Damascus, Asiatic Turkey, was destroyed by fire on April 29; loss, \$10,000,000.

RUSSIAN NOTES.

[From Consul General John H. Snodgrass, Moscow.]

Colonizing Turkestan.

The journey of the director of the land settlement department to Turkestan is reported to be undertaken with two objects in view. He is said to wish to investigate the question of a rapid colonization of Turkestan, especially at the border of China and Afghanistan, with emigrants from the south of Russia. In consequence of the law passed in 1910 in regard to the utilization of the surplus land belonging to the native nomads, there is land to be disposed of in the Syr-Daria, Ferghana, and Samarkand districts. In this manner the discontinuation of the emigration movement to Siberia is to be compensated by the emigration to Turkestan. The other object in view is to gather information as to the development of Russian cotton culture in Turkestan.

Promoting Trade with Italy.

At a recent meeting of the Moscow section of the Russian-Italian Chamber of Commerce the following resolutions to promote trade between the two countries were passed: (1) To issue twice-a-month bulletins with the prices for Russian and Italian goods. (2) To keep Italian trade chambers informed of Russian goods which might find a market in Italy, giving prices and stating the places where the goods could be obtained. (3) To organize in Moscow an exhibition of samples of Italian goods brought into Russia and of Russian articles which could find a market in Italy, it being suggested that a similar exhibition might be arranged in Genoa. (Since 1911 the Italian language has been taught in the Moscow Institute of Commerce.)

At the same meeting it was decided to petition the Russian and Italian Governments as follows: (1) To permit the forwarding of Italian fruit, in the wintertime, in specially heated cars attended by railway employees in transit, with payment of custom dues in Moscow. (2) In view of the conditions fixed by the Italian exporters and of the questions that have arisen in regard to the quality of the goods received, it is necessary to grant to the consignee the right to examine the goods upon their arrival at a port of entry before taking out the bill of lading from the bank. (3) To request that the railroad tariff on Italian lemons, oranges, and mandarins be lowered to that on apples.

Railways for Transcaucasia.

The two most important railway projects under discussion for the last few years were both planned to connect Transcaucasia with the railways of European Russia. One, the Tchernomorsky Railway, was to run along the coast of the Black Sea, over a narrow tract of land between the shore and the mountains, connecting Tuapsey, Sotchi, Gagri, Sukhum-Kale, and other seaside places which form the so-called Russian Riviera. The other, the Perevalny Railway, was to cross the mountains through the Arhotsky Pass and to form a direct line to Tiflis, which up to now has been reached by the round-about Beslan-Baladchary route along the coast of the Caspian Sea. Preference has now been given to this second project.

The Tchernomorsky line would certainly bring life into the coast district of the Black Sea and further the development of the various

sea resorts, which are laboring under the disadvantage of very poor means of communication, as they are to be reached only by steamers which, because of the lack of good harbors, are not always able to enter. This line, however, does not promise to be a very lucrative one, as the transportation of goods will be minimal in view of the competition of the cheap sea freight. The cost of construction will be heavy in consequence of the great number of bridges across mountain streams, the construction of embankments, dikes, etc.

The cost of the Perevalny line will not be less, as the project includes a tunnel 20 miles in length. This road will not bring about an immediate development of the country through which it will run, though it will without doubt in due time be a factor in the exploitation of the mineral wealth of the Caucasus. Its chief object is to create a rapid line for the transit of passengers and goods between European Russia and Transcaucasia. With its construction the journey from Moscow to Tiflis will be shortened by one day for passengers and by three days for goods, and much merchandise that now takes the Beslan-Baladchary-Tiflis route will undoubtedly be sent over the Perevalny Railway. The principal advantage, however, is in the strategical importance of this railway, promoting a much more rapid communication with the southern borderland of the Russian Empire, and it has been decided to begin the construction of this line without delay.

Joining the Volga with the Black and Azov Seas.

Among the many gigantic propositions for the industrial advancement of Russia that are receiving the attention of the Government is the project for connecting the Volga River with the Black and Azov Seas. The plan contemplates the construction of a canal, with the excavation of the Don to make this river navigable, for ships of the Volga type that would then have a direct route to the sea.

Prince Sherbatoff and associates have applied for a concession containing the following terms: The company constructing the canal will have the right to issue shares and bonds to the amount of \$4,000,000 and \$36,000,000, respectively. The Government guarantees 3 per cent interest on the shares for the period of construction and also the payment of interest on the bonds and the amortization of the same during the life of the concession. The company will have the right to divide the profits proportionally among the shareholders and bondholders, the same as the railway companies. The concession is for 99 years, but the Government is entitled to purchase the canal 30 years after the opening of navigation. There are to be four groups of locks. The total length of the canal is to be 60 miles, the depth about 11 feet and the width about 140 feet. It has been calculated that it will take 20 hours for ships to pass the canal. The canal, it is estimated, will be able to admit 54,000,000,000 pounds of freight during the year.

One of the chief advantages is the economic importance of the canal, not only for the Volga and Don districts, but also for Transcaucasia and especially Siberia if a further joining of the River Kama with the River Ob takes place. The bulk of the grain from the Volga would go by the canal instead of the Baltic Sea. From the Kama district timber may be transported by this canal. From the southwestern district sugar may be exported via Odessa, the Azov ports, and the

canal, and naphtha from the ports of the Caspian Sea and the Volga. By the same route, cotton may be brought from Transcaspia. Lastly, enormous supplies of grain and other products may be brought along the canal from Siberia, especially from the districts of the Rivers Ob and Enissei.

The cost of constructing the canal is estimated at \$43,000,000. The work on the River Don will perhaps approximate \$10,000,000.

[From Consul John F. Jewell, Vladivostok, Siberia.]

Trade Directory of the Russian Far East.

A 1912 directory published in Vladivostok not only contains nearly all the different calendars of the world for the use of the many peoples with different religions that live in this region, but has a great amount of other valuable information covering the Russian Far East. It contains descriptions of the Provinces of the Priamur, Yakutsk, Transbaikalia, Maritime, Kamchatka, and Sakhalin, that of the Priamur being divided into historical, geographical, colonization, the fishing, timbering and agricultural industries, mining, manufacturing, and trade. Under the Maritime Province are given directories of Vladivostok (89 pages); St. Olga district; Nikolsk-Usurisk and district; Iman district; Khabarovsk, city and district; Nikolaiefsk, town and Udsck district; territory of Usuri, Cossack lands; and stations of the Usuri Railroad.

In the Amur Province section there are directories of the city of Blagovestchensk; town of Zeia-Pristan; settlements on the Shilka and Amur Rivers; and the Amur Railroad. Under Transbaikalia may be found directories of Tchita, Aksha, Barguzinsk, Verchniudinsk, Messoovsk, Nertchinsk, Selenginsk, and Troitskosavsk. Directories are given of Vilyuisk, Olekminsk, Verkhoyansk, and Sredne-Kolymsk in the Yakutsk Province; Port Alexandrovsk in Sakhalin; and Petropavlosk, the capital of the Province of Kamchatka. This work also has added a directory of Harbin, Manchuria, and of stations on the Chinese Eastern Railway.

The volume contains an alphabetical table of names of persons and firms of all trades and industrial undertakings in towns and other settlements in the different Provinces mentioned, and supplies tariffs, navigation lists, and maps of the principal towns of the Russian Far East.

[The directory is printed in the Russian language, and the copy forwarded by Consul Jewell has been added to the collection of similar volumes from many countries on file, for public reference, in the Bureau of Manufactures.]

TENDERS IN CHILE.

[Reuter dispatches from Santiago; sums being stated in United States currency.]

Tenders for the new harbor works at Valparaiso were presented on April 20 as follows: Galtier, \$13,267,300; Holzmann, \$14,344,000; Sir John Jackson, \$16,470,000; and Pearson & Son, \$13,708,000. [The blue prints and specifications of this undertaking were presented to various American firms by the Bureau of Manufactures at Washington.]

The Chilean Minister of Industry states that the Government is considering three proposals made by French, Belgian, and American financiers for leasing the State railways, with a view to improving their working.

HEMP, RAPE, AND CASTOR SEED IN TURKEY.

[From Consul General G. Bie Ravndal, Constantinople.]

Regarding the production of hemp, rape, and castor seed in Turkey, after making inquiries through the various consulates in the Turkish Empire, the following information is presented:

Between the towns of Orfa and Severeck, in the central part of Asia Minor, there are rich plains covered with hemp, which yield considerable crops every year. A small amount of hemp is raised near Jaffa and the fiber is used by the natives for simple rope making. In the vicinity of Damascus the common variety of hemp seed is grown. None is sent out of the country or crushed for oil extraction, and the only use to which it is put is as food for birds—birdseed. A few kilos of hempseed oil or cake is imported into this country by a few retail druggists who dispense it for sundry pharmaceutical purposes.

In the vicinity of Orfa, Beridjik, Zor, and the Amouk plains, near Antioch, a certain amount of hemp is cultivated. There are no statistics as to the amount produced. Very little oil is extracted—no cakes are made—the seed being roasted, salted, and eaten by the natives. The retail price is equivalent to 2.1 cents per pound. The hemp is used entirely for rope making locally and for mixing cement used for roofing.

About 5,000 to 6,000 sacks are exported annually from Smyrna, principally to Australia, Germany, and the United States. There is only one variety of this seed. For sales abroad, samples are submitted merely for the purpose of ascertaining the percentage of extraneous matter contained. Hempseed is chiefly used in foreign countries for oil extracting and for feeding birds. The present (Mar. 30) local prices for hempseed are 15.75 to 18.50 piasters (69 to 81 cents) per kile (1.1 bushels) of 15 okes (42 pounds), according to the quantity of extraneous matter contained. The oil of this article is not imported into Smyrna.

A certain amount of hempseed imported from Erzerum is exported from Trebizond. The amount varies from 500 to 2,000 bags a year, and it is sold at about 2 piasters (9 cents) per oke (2.82 pounds).

The exportation of hempseed from the district of Samsun amounts to 2,000 to 3,000 sacks a year, most of which is sent to Austria-Hungary, a small quantity going to America. The best-known qualities are those of Fatza, Haji-Keuy, Urmiah, and Tscharshamba. The hempseed value varies always according to the quality and demand. Its current price fluctuates between 60 paras (1½ cents) and 70 paras (1¾ cents) per oke (2.82 pounds).

Throughout the interior rope is made with hemp. This article is exported in small shipments to Trieste and Hamburg. The loose manner of packing operates against large orders being received. The exportation of canary seed and linseed is considerable, amounting to over \$1,000,000 each year, and hempseed could likewise be developed into an important part of Turkish trade, and is only waiting some kind of organization.

Rapeseed is planted in the Samsun district in small quantities and is mostly consumed locally. There is no exportation of any kind.

In the district of Mersina a few castor beans are picked up from wild plants; no marketable quantities are secured. Castor beans

grow wild all through the Haman, Aleppo, Damascus, and Alexandretta districts, but are not cultivated nor utilized in any way whatever. They are cultivated on a very small scale in the vicinity of Aleppo and in various outlying districts of Idlib, but no statistical information can be given.

The time of harvesting the hemp and castor beans is the same as that of cotton, i. e., during the months of October and November.

The seed of hemp, as also that of castor beans, is imported from Europe, but no figures can be given of the amount thereof, nor of the limited exportation of the latter, which goes principally to Italy.

AMERICAN IMPORTS OF SEEDS.

The importation for consumption of the foregoing seeds into the United States, as well as of other seeds, together with the value per unit of quantity, for the past two fiscal years was as follows:

Seeds.	Duty.	1910.		1911.	
		Pounds.	Unit value.	Pounds.	Unit value.
Anise.....	Free.....	938,957	\$0.047	1,144,845	\$0.058
Beet, except sugar beet.....	4 cents per pound.....	624,120	.094	638,703	.103
Cabbage.....	8 cents per pound.....	161,970	.229	261,129	.341
Canary.....	Free.....	6,768,334	.020	6,552,722	.021
Caraway.....	do.....	2,951,702	.061	2,856,908	.053
Cardamom.....	do.....	126,267	.410	94,398	.483
Carrot.....	4 cents per pound.....	175,514	.162	154,633	.170
Castor beans or seeds.....	25 cents per bushel.....	1,744,807	1.15	1,790,241	1.27
Cauliflower.....	Free.....	6,479	5.34	10,406	4.00
Celery.....	10 cents per pound.....	188,573	.094	340,926	.093
Collard.....	8 cents per pound.....	831	.196	602	.124
Coriander.....	Free.....	1,386,064	.038	1,069,099	.034
Corn salad.....	4 cents per pound.....	6,635	.156	9,816	.127
Cotton.....	Free.....	922,751	.006	1,365,415	.010
Cummin.....	do.....	651,957	.065	615,668	.069
Eggplant.....	20 cents per pound.....	2,503	.786	1,489	.719
Fenugreek and fennel.....	Free.....	1,265,565	.022	1,643,651	.023
Grass:					
Clover.....	do.....	13,161,110	.110	24,939,722	.123
All other.....	do.....	20,946,117	.044	35,422,862	.036
Hemp.....	do.....	2,739,070	.023	3,061,537	.022
Kale.....	8 cents per pound.....	17,343	.229	25,324	.155
Kohlrabi.....	do.....	49,651	.110	16,869	.189
Linsseed or flaxseed.....	25 cents per bushel.....	15,002,842	1.71	10,499,962	2.04
Mushroom spawn.....	1 cent per pound.....	368,165	.026	423,067	.026
Mustard.....	Free.....	9,124,305	.041	8,512,475	.035
Parsley.....	4 cents per pound.....	74,601	.085	75,427	.090
Parsnips.....	do.....	89,283	.072	56,541	.074
Pepper.....	20 cents per pound.....	16,315	.423	16,200	.414
Poppy.....	15 cents per bushel.....	144,203	2.29	157,783	2.43
Radish.....	4 cents per pound.....	470,282	.116	581,495	.123
Rape.....	Free.....	3,288,620	.031	3,039,349	.032
Spinach.....	1 cent per pound.....	934,503	.046	972,070	.050
Sugar beet.....	Free.....	10,309,075	.063	11,108,881	.066
Turnip and rutabaga.....	4 cents per pound.....	1,233,964	.065	1,759,483	.088
Other oil seeds.....	25 cents per bushel.....	14,554	2.49	16,697	2.36

¹ Bushels.

Over half of the imports of castor beans are shipped from England, about one-third comes direct from British India and most of the balance from Brazil.

Cotton ginning firms and agencies in the Ferghana, Samarkand, Syr Daria, Bokhara, and Kniva have been listed by Consul General Snodgrass, of Moscow. Copies may be had from the Bureau of Manufactures at Washington.

FOREIGN HAIRPIN TRADE.

[From Consul General John L. Griffiths, London, England.]

British Makes Sold in London.

There are 15 manufacturers of hairpins listed in the London directory, but in almost every case the actual factory is located at or near Birmingham. There are no available sources from which to obtain estimates of their individual sales or of the capital invested. These firms do not confine themselves to the making of hairpins, but also manufacture needles, pins, and similar articles.

There is no duty on hairpins imported into England; and while there are some foreign brands on the market, the volume of the trade is said to be small, and, in fact, has little influence on the industry. Inquiries at various retailers for hairpins of foreign manufacture have, without exception, been met with the reply: "We do not sell them; we handle only British."

Hairpins are sold by the manufacturer direct to the retailer through salesmen, who call periodically, but who represent and sell, besides hairpins, a great many other articles made by their firms. Practically no advertising is done except for the introduction of a newly invented hairpin. At present there appears to be no such advertising. The cartons used are merely ordinary common card boxes, not particularly attractive in appearance, labeled with the trade indication of size and style. When empty they are destroyed by the retailer. It is customary in England for retailers to require the manufacturers to print their (the retailers') names upon the packet, in lieu of those of the makers. The usual retail price for a packet of hairpins is 1 penny (2 cents), the number in the packet varying with the size and style of the pin.

In my opinion, from information gained from retailers and users, there is not a very favorable prospect for introducing American hairpins into England unless they are of a novel character, and even then it would require continual effort on the part of active salesmen to secure any trade, the British makers being in control of the market.

[From Consul General A. M. Thackara, Berlin, Germany.]

Varieties and Prices of Hairpins at Berlin.

According to the city directory there are only five hairpin factories in Berlin. Hairpins are sold both direct to the retailer and through jobbers. The following is a list of the kinds handled by one of the larger department stores of Berlin:

The "De Long Jet Japan," made by the De Long Hook & Eye Co., of Philadelphia, are pins $2\frac{1}{2}$ inches in length, and are put up in a red wrapper. They sell for 20 pfennigs (4.76 cents) per package of 24. The "Best Cast Steel No. 9," wrapped in a yellow cover, are priced at 10 pfennigs (2.38 cents) a package of 24. These pins appear to be made in England. The "Best Bronzed," manufactured by Kirby, Beard & Co., of Birmingham and London, retail for 25 pfennigs (5.95 cents) a package of 24.

The "Ada," a heavy type of pin and put up in a pink cardboard box, sells for 8 pfennigs (1.9 cents) a dozen. This is probably a German pin. The H. A. Dubois plastic steel pin, made in Duren, Germany, retails for 25 pfennigs (5.95 cents) a package of 24. "No. 30 Epingles à cheveux à la Nègresse," which is manufactured by

Louis Renner & Co., of Paris, sells at the same price. The package is of blue cardboard.

"No. 33 premier choix" appears to be made in France and sells for 5 pfennigs (1.19 cents) a package. "No. 36 premier choix," which is made by the same company, sells for 7 pfennigs (1.67 cents). "No. 21 Epingles de politure speciale" is put up in a carton the printing on which is all in French. However, the words "Manufactured in Germany" appear. The cost of this pin is 10 pfennigs (2.38 cents) per package of 24.

To find a possible market for their wares in this city, it is suggested that American hairpin manufacturers correspond with the large Berlin department stores, a list of which will be supplied, upon request, by the Bureau of Manufactures.

[From Consul General Frank H. Mason, Paris, France.]

French Market Supplied by Foreign Firms.

Curiously enough, very few hairpins are made in France, almost the entire supply being imported from Great Britain, Belgium, and Germany. The kinds most sold are the ordinary black japanned wire hairpin, generally straight and plain, but some with waves and curved places in the wire to prevent them slipping out of the hair too easily. Still another kind, made wholly in Great Britain and called here "Epingles Anglais," have the two shanks of the pin wound with brown, auburn, or black cotton floss, to match the color of the hair, and also, by thus presenting a more adhesive surface, to prevent the pin from slipping out and being lost.

Hairpins are sold very cheaply and in large quantities by the principal department stores. While the market of Paris seems to be fully supplied, there may be an opening for American goods that can compete in quality and in price after paying the long freight haul and import duty.

[A list of Parisian department stores and of the principal wholesalers handling hairpins in that city may be obtained from the Bureau of Manufactures.]

A RESTRICTED FIELD FOR TELEPHONE SUPPLIES.

[From Consul William F. Doty, Riga, Russia.]

Relative to frequent inquiries from the United States as to the possibility of furnishing electric supplies to telephone companies operating in Riga and elsewhere in the Baltic Provinces, it may be stated that the Ericson telephone (under a Swedish patent), manufactured at St. Petersburg, can alone be employed in the public telephone service in the large cities of this district. There are, however, a number of private telephone unions in the rural districts, formed by owners of the large country estates, affiliated to the telephone company, and here there might be a field for the sale of American telephone apparatus. These unions would be reached readily through firms dealing in telephones and supplies, a list of which can be obtained from the Bureau of Manufactures.

The value of telegraph and telephone apparatus and supplies (which have not been segregated in the published official statistics) imported in 1910 at Riga was: From Germany, \$5,345; Sweden, \$3,594; Great Britain, \$3,584.

BEER NOT POPULAR AMONG CHINESE.

[From Consul General George E. Anderson, Hongkong.]

The attempt of a corporation organized in Hongkong with foreign capital, largely from Honolulu, to establish a brewing business on the South Asiatic coast has been unsuccessful. The concern erected a modern brewery on a portion of the mainland opposite Hongkong in 1909, but lost money from the beginning. The company has gone into voluntary liquidation and is attempting to sell its plant.

The concern was organized with a capital of \$500,000 gold. The plant established here was finely equipped, mostly with American machinery and appliances, including an outfit of glass-lined steel tanks, and was modern in every respect in installation and operation; in fact, one of the reasons for the failure of the enterprise as a business undertaking is that the capacity of the plant (100,000 barrels of beer annually) is so far beyond present possible sale that its economical operation has been difficult if not impossible. However, the chief obstacle has been the lack of success attending the firm's efforts to attract the patronage of the Chinese. In some parts of the new Republic there is a fair consumption of beer among the natives, but, as a rule, the Chinese prefer their own alcoholic beverages, or, at most, take to foreign drinks other than beer.

Hongkong's Imports of Foreign Beers.

For a time there was some reason to expect the successful introduction of beer among the Chinese of Hongkong. Sales of the company's output increased considerably, and growing popularity gave some practical ground for anticipating a change in Chinese tastes. The concern also operated an ice factory in connection with its brewery, and income from this source lent some support to the business. The fact finally became plain, however, that for the time being the Chinese do not take to beer.

There is a considerable consumption of foreign beers among foreigners in Hongkong and in the Chinese ports deriving their supplies through Hongkong. The figures of the import and export office of the Hongkong Government, which are complete in that they represent taxation on imports of such goods, show that at the beginning of 1911 there were in stock 95,535 gallons of ale, beer, and stout. During the year importations amounted to 748,900 gallons. Of this total stock of 844,435 gallons, 322,711 gallons were exported to various Chinese ports near at hand, 325,548 gallons were consumed, and 196,176 gallons were left on hand. During 1910 the stock on hand (78,894 gallons) and arrivals (605,212 gallons) totaled 684,106 gallons, of which 271,142 gallons were reexported and 317,429 gallons were consumed.

These two are the only years in which Hongkong's tax on alcoholic products has been applied and for which reliable figures are to be had. They seem to indicate that, in spite of the failure of the local brewery to establish itself here with a high-grade product brewed to suit the climate, there is an increase in both reexports and consumption. This is probably accounted for by the fact that the imports of high-grade beers, ales, and similar drinks in this part of the world are largely of special English, German, and Austrian brands for which foreigners here have a special liking, in which sentiment plays an important part. Many of these drinks are used by prescription to avoid the depressing effects of a difficult climate. The cheaper-grade

goods come largely from Japan and as a rule do not attempt to reach the better trade.

Trade Uncertain.

Several years ago, particularly soon after the Spanish-American War, American beer had a rather strong hold on this market, and several of the larger American brewing interests gave considerable attention to the trade, especially in the ports of the north and through Hongkong. Cheap Japanese beers have been cutting into the sales of other countries, however, and the trade also has been very irregular—averaging something like \$400,000 gold annually for all China at the present time; but once (in 1905) running as high as 1,200,000 taels, or more than twice its present average volume and value. All China in 1910 bought beers to the value of \$393,780, of which about one-half came from Japan direct and one-fourth from Germany direct; American beers had no part whatever in the trade. The experience of the Hongkong brewing enterprise seems to indicate that the immediate future of the trade is uncertain.

JAMAICA PREPARING FOR PANAMA CANAL SHIPPING.

[From Consul Julius D. Dreher, Port Antonio.]

At last the Government of Jamaica has taken a step which shows that it recognizes the importance of the opening of the Panama Canal and the necessity of providing additional shipping facilities at Kingston. The legislative council of the colony has just unanimously appropriated \$12,000 to purchase a tract of land south of the railway and along the water front of the fine harbor at the capital. It is announced that the primary reason for acquiring this land is to provide a coaling station or a dock, or both. The advantages of Kingston Harbor for such purposes and the need of such facilities to accommodate the increased shipping after the opening of the Panama Canal were set forth in a report from this consulate on "The Panama Canal and the West Indies," published in Daily Consular and Trade Reports for January 26, 1912.

The United Fruit Co. has decided to improve the shipping facilities at Bowden, on Port Morant Bay, where it owns a wharf to accommodate its fruit ships and also keeps on hand a quantity of coal. During the recent coal strike in Great Britain it was found necessary to coal at this wharf the ships of the Elder & Fyfe Line, of London, which is under control of this company. By employing all available local labor and East Indian coolies from the neighboring banana plantations, it was possible to load a maximum of 40 tons of coal an hour. To facilitate the coaling of its fruit ships, as well as to provide against emergencies, the company has taken steps to enlarge and improve its wharf accommodations and to install a crane at Port Morant in order that a minimum of 50 tons of coal an hour may be loaded without employing the coolie laborers needed on the plantations for cutting and hauling bananas to the port. As this harbor is so much nearer the eastern end of the island than Kingston, that ships could save from three to four hours by coaling at Port Morant, it is probable that the United Fruit Co. may decide to make Bowden a general coaling station for ships on voyages to and from the Panama Canal. While this harbor is not nearly so large as that at Kingston, ships drawing 25 feet of water may easily be accommodated at Port Morant.

SOUTHERN CHINA TRADE NOTES.

[From Consul Julean H. Arnold, Amoy.]

Secondhand Clothing in Demand.

The sudden demand which has arisen all over China for foreign clothing, shoes, hats, underwear, etc., continues in this district unabated. The low purchasing power of the ordinary Chinese makes cheapness a prime consideration in the demand for these wares. Good secondhand American clothing ought to find a market, as evidenced by the fact that good prices are realized for secondhand clothing here.

Buttons and tailors' supplies are also in demand. This office will be pleased to furnish American dealers the names of local merchants interested in the above items.

Sugar Industry Developing in Amoy.

The high price of sugar abroad during the past year and the success of the Formosa sugar industry have stirred the Chinese of this section of China to consider the possibilities of the development of the industry in this district.

South Fukien has produced sugar cane for centuries, but it has been allowed to deteriorate year after year until now the cane is of a very inferior quality. A lesson is being taken from the Japanese in Formosa, who replaced the native cane there by Hawaiian and Java canes and increased the island's annual production of sugar from 60,000 tons to 325,000 tons in 12 years' time. Shoots are now being imported from Formosa by local Chinese. Already three small modern sugar mills have been erected in this district and, with the reestablishment of stable political conditions, substantial developments in this industry will undoubtedly be made, for there are here many Chinese of wealth and good business ability.

Sales of American Flour in Amoy.

During 1911 Amoy imported 150,000 barrels of American flour, or three times as much as during 1910. Famines, floods, and the revolution reduced the wheat production in central China to such an extent as to practically close the Shanghai flour mills. The price of rice during the past year has been the highest in years, which favored the consumption of flour. Favorable silver exchange and cheaper flour in America during 1911 as compared with prices the few years preceding all helped the American imports to China. Indications point to a continuance during 1912 of the conditions favoring American flour imports into China. The China trade takes the low-grade flours only. Strength is preferred to whiteness.

The Hongkong native flour importers sell flour to the Amoy merchants on long-time credit basis. One-fourth is paid down when the flour is shipped, one-fourth three months thereafter, and the balance is collected at the end of the year, the great settling time for the Chinese people.

Condensed Milk.

American manufacturers of condensed milk are not pushing their goods in China with the vigor which the opportunities in this market warrant they should. British dealers are carrying on an extensive advertising and sales campaign, using literature and advertising matter printed in Chinese. One company furnishes its representative with a motor launch to be used in travel in the interior in his adver-

tising campaign. Last year the imports of condensed milk in this district doubled over those of 1910. In Formosa, across the channel, \$100,000 worth of condensed milk was imported in 1911. The Chinese people do not raise milch cows, but are gradually learning the use of milk and appear to take readily to the use of condensed milk. A splendid market offers here provided live American business methods are used in pushing the business. Its possibilities are without limit. But only the man on the field can get the business.

NEW GOVERNMENT PUBLICATIONS.

The Superintendent of Documents, Government Printing Office, Washington, D. C., has for sale the following new publications, at the prices affixed:

Bureau of Standards.

Ampere.—Determination of international ampere in absolute measure; 124 pages, 3 plates; price, 20 cents.

Cement.—Tests of absorptive and permeable properties of Portland cement, mortars, and concretes, with tests of damp-proofing and waterproofing compounds and materials; 127 pages, 6 plates; price, 20 cents.

Helium.—Luminous properties of electrically conducting helium gas.—Reproducibility; price, 5 cents.

Neon.—Wave lengths of neon; price, 5 cents.

Potentiometer.—(1) Deflection potentiometers for current and voltage measurements; price, 10 cents, (2) Outline of design of deflection potentiometers with notes on design of moving-coil galvanometers; price, 5 cents.

Sodium oxalate.—Hydrolysis of sodium oxalate and its influence upon test for neutrality; paper, 5 cents.

Sulphur.—Determination of total sulphur in india rubber; price, 5 cents.

Immigration Commission.

Immigrants in Industries, Part 2—Iron and Steel Manufacturing, 807 pages, 4 maps, 1 plate; price, 65 cents.

Nautical Almanac Office.

American ephemeris and nautical almanac [calendar] year, 1914; 742 pages, 2 maps; price in cloth, \$1. The American nautical almanac in paper, 30 cents.

Tariff Board.

Wool and manufactures of, 5 parts, and index in 2 volumes; 1,278 pages, 18 plates, 2 maps, 1 table. This is a reprint, with addition of lists of contents and illustrations, of House Document 342; paper, \$1.30 per set (2 volumes).

Panama Railroad Commission, Special.

Advisability of establishment of Pacific steamship line by Isthmian Canal Commission (S. Doc. 409); price, 5 cents.

Library of Congress.

Orchestral music catalogue: Scores. Compilation of Division of Music; 663 pages, with copious class and title indexes; price, \$1.

United States Senate.

Arbitration.—List of 74 arbitration treaties and conventions submitted to and acted upon by the United States Senate (S. Doc. 373); presented by Mr. Lodge; price, 5 cents. Senate Document 353 also includes the speech of Senator Lodge, as well as the list of treaties; price, 5 cents.

Fertilizers.—Senate Document 190 on the fertilizer resources of the United States; with plates and map; price, 75 cents.

Employers' liability.—Senate Document 338, volume 1, contains the message of the President transmitting the Report of the Employers' Liability and Workman's Compensation Commission, in which he commends the report and advocates the passage of the bill drafted by the commission. Volume 2 is much larger, containing hearings, briefs, tables of cases, and general index; price of both, 15 cents.

Lighthouse Bureau.

Medical handbook for use of lighthouse vessels and stations; price, cloth 30 cents. Useful also to others whose occupations put them out of reach of doctors.

MANCHURIAN COMMERCIAL NOTES.

[From Consul Albert W. Pontius, Dalny.]

Sugar Imports—Dust Coal for Japan.

While, with imports of sugar aggregating 7,021 tons, 1911 showed an increase of nearly 2,000 tons over the preceding year, the receipts from Tokyo and Yokohama fell off nearly two-thirds; on the other hand, those from Takao (Formosa) increased fourfold.

The Japanese demands for Fushun dust coal have increased, especially since the beginning of the current year. Already (Mar. 20) about 10,000 tons have been shipped, mostly to Kobe and Nagoya. Tokyo, too, has contracted for over 30,000 tons for delivery during 1912. Its peculiar suitability for ceramic purposes is now widely acknowledged in Japan; still, its use is at an experimental stage. There would be a rush for this dust coal if a reduction in price, freight, or incidental charges could be effected.

Dalny-Yokohama Trade—Candle Factory.

According to statistics prepared by the wharf office of the South Manchuria Railway Co., Dalny's trade with Yokohama in 1911 consisted of 188,777 tons of imported and 9,739 tons of exported articles.

The principal items were:

Imports.		Exports.	
	<i>Tons.</i>		<i>Tons.</i>
Comestibles.....	1,365	Beans.....	55,404
Tobacco.....	771	Bean cake.....	109,749
Sundries.....	7,613	Coal.....	13,251
		Sundries.....	10,373
Total, 1911.....	9,749	Total, 1911.....	188,777
1910.....	14,810	1910.....	111,179
1909.....	12,175	1909.....	161,629
1908.....	24,380	1908.....	83,952

Yokohama ranked first in the list of foreign ports to which Dalny shipped goods during 1911 and seventh as a supplier of Dalny's imports. The falling off in the latter was due mainly to a decrease in the imports of railway supplies.

The proposed candle factory for Dairen has so far failed to materialize. At present the only plant of this kind here is the one worked by the Sanshin Yoko. The capital invested in this enterprise is about \$5,000. The factory has installed 13 sets of machines, each set with a daily capacity of 3,000 candles of 12 ounces each. The best market for the output is Harbin and Chinese towns in the north. The principal materials are paraffin, bought of the Standard Oil Co., of New York, mixed with spermaceti. Paraffin imported from India is much superior in quality and will make a candle better adapted to the Manchurian climate but its price is almost prohibitive. Compared with imported candles, the local product is somewhat inferior in quality, but the difference is more than made up by its lower price.

Glass and Tile Industries.

The glass-manufacturing industry of south Manchuria is still in its infancy. There are 3 factories at Mukden, 2 each at Kirin and Changchun, 4 at Harbin, and 1 in Dairen (Dalny). The annual output of all of them barely reaches \$100,000 in value. The bulk of the

materials used by these works consists of waste glass collected for the purpose; the siliceous stone, which may be called almost ubiquitous in these parts, is practically left untapped. Some of the Japanese factories import their material from Mikawa Province, principally for making oil lamps (for Chinese customers), and glass flycatchers. Bottles for the use of the various hospitals and medical practitioners are in much demand.

The Miyazaki tile factory is by far the largest of its kind in Dairen. During 1911 excessive rains spoiled 100,000 pieces; in consequence, the total output for that year consisted of 500,000 pieces of red tiles made on the German pattern and 200,000 pieces of Japanese tiles. This factory has secured a contract for 600,000 pieces of terra cotta intended for the new Yamato Hotel on Central Circle. A drying house, with capacity of 200,000 pieces at a time, was recently completed. This house is two storied and has two kilns installed in the center of the lower floor. In addition to filling the contract mentioned the company expects to manufacture this year 600,000 red tiles and 300,000 Japanese tiles. As the result of the completion of the equipment, it hopes to lower its prices all around by one-half sen (approximately one-fourth cent) a piece, irrespective of the kinds.

Stability of Manchuria's Foreign Commerce.

An inspection of the customs revenue of the ports of Dalny and Newchwang during 1910 and 1911 would seem to indicate that the foreign trade of the Manchurian Provinces will retain its healthy condition for a long time to come, and that this trade will not only continue to improve the commercial conditions of the two ports mentioned, but give an added impetus to the commerce of Antung and Vladivostok as well. With receipts in 1911 of 1,358,000 haikwan taels [the present value of the haikwan tael is 70.5 cents United States gold], the customs port of Dalny is sixth in importance in China. The first five are: Shanghai, Tientsin, Canton, Hankow, and Swatow. Kiaochoo ranks seventh and Newchwang eighth in the matter of customs revenue.

The enterprising import and export merchants of Dairen (Dalny) have foreseen every future contingency likely to affect either branch of the trade, and the preparations made along practical lines have not only created a steady and permanent demand but tend to augment it in the future as well. In imports the demands of the native consumer have been consulted and complied with to the smallest detail, the convenience of steamer and rail transportation and the extension of credits being emphatic points of advantage. The 45 steam bean-oil mills now established in Dairen are evidence that in exports (of which beans is the chief article in Manchuria) the local port is certain to lead in shipments of bean oil and cake, the efficient and economical railway transportation facilities contributing largely to the enormous trade now had in the sale of beans to Japanese and to other Chinese ports.

Consul E. Haldeman Dennison reports total exports to the United States from Dundee, Scotland, for the first quarter of 1912, as being \$2,781,222, an increase of \$944,577 over the 1911 quarter. This increase was almost entirely due to the enormous quantities of potatoes shipped, the value of which was \$821,806.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8773. Telephone and telegraph supplies.**—Tenders will be received by the Deputy Postmaster General, Hobart, Tasmania, until June 10, 1912, for 6 miles of paper-insulated, lead-covered telephone cable (schedule No. 38); glassware for batteries and battery material (schedule No. 39); tape, ink, and oil for telegraph instruments (schedule No. 40); common battery telephones and parts (schedule No. 41); insulators and parts (schedule No. 42); iron, copper, and bronze wire, copper tapes and binders, and jointing sleeves (schedule No. 44); wire and cable (schedule No. 45). Local representation is necessary.
- No. 8774. Rails and fishplates.**—Tenders are invited until May 29, 1912, by the Secretary, Department of Home Affairs, Melbourne, Australia, for supplying 80-pound and 60-pound steel rails and fishplates, required for the construction of the Kalgoorlie-Port Augusta railway.
- No. 8775. Dredgers, barges, and steamers.**—The Minister of Commerce, St. Petersburg, Russia, invites tenders for 2 dredgers at an estimated cost of \$335,000; 6 steam mud barges, which will cost about \$370,000; 2 steamers, costing about \$40,000; and coal barges at an estimated cost of \$25,000 for the Sea of Azov. Tenders will be received through local agents only.
- No. 8776. Boats.**—The Treasury Department, Constantinople, Turkey, will accept tenders for 3 tugboats for the Tigris at an estimated cost of \$122,000; customs coast-guard vessels, estimated at \$75,000; and admiralty boats, the cost of which is estimated at \$90,000.
- No. 8777. Envelopes, ink, wax, etc.**—Tenders will be received at the office of the Deputy Postmaster General, Brisbane, Australia, until June 5, 1912, for envelopes (schedule No. 214), letter-box fronts (schedule No. 218), and obliterating ink, sealing wax, and twine (schedule No. 219). Local representation is necessary.
- No. 8778. Telegraph material.**—Tenders will be received by the Deputy Postmaster General, Melbourne, Australia, for the following supplies: (1) Until May 28 for 100 tons of bronze wire, 262 tons of hard-drawn copper wire, 188,500 copper binders, 11,500 sleeves, and 126,000 copper tapes (schedule No. 686). (2) Until June 4 for 373 tons of galvanized-iron wire, 51 tons of galvanized-steel wire, and 12,500 sleeves (schedule No. 687), and 1,000 telephone protectors. Local representation is necessary.
- No. 8779. Canvas.**—Tenders will be received by the Deputy Postmaster General, Sydney, Australia, until June 5, 1912, for supply and delivery of canvas, cotton duck, and tanned drill for two years (schedule No. 162). Local representation is necessary.
- No. 8780. Railways.**—The Public Works Department, Madrid, Spain, invites tenders for the construction and exploitation of a narrow-gauge line from Logrono to Torrecilla de Cameros. The same department will receive tenders until May 29 for the construction and exploitation of several sections of the Madrid electric tramways. Tenders will be received through local firms only.
- No. 8781. Pier construction.**—The Urban District Council, Rhyl, Wales, will accept tenders for the erection of a pier at an estimated cost of \$256,000.
- No. 8782. Cabinets and filing devices.**—Tenders are invited by the Egyptian Ministry of Finance for supplying 100 filing sections, 50 panel ends, and 100 index cabinets for the use of Government departments. Sealed tenders will be received until May 23, 1912, at L'Economat Central du Ministère des Finances, Cairo, Egypt, at which address the cahier des charges, together with samples may be seen. Temporary (legal) domicile in Egypt is necessary for the contractor.

Dardanelles reopened.—Under date of May 2 the American Embassy at Constantinople reports the decision of the Ottoman Government to reopen the Dardanelles to commercial traffic.

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DEVELOPMENT OF ERITREA.

[From Consul General James A. Smith, Genoa, Italy.]

The Italian colony of Eritrea comprises the littoral zone of Africa bordering upon the Red Sea, with Nubia on the north, Abyssinia on the west and south, and a small corner of the Sudan on the north-west. The southern and western boundaries have not as yet been definitely established.

The colony has an area of approximately 52,162 square miles, of which nearly half is included in the littoral zone, about 5,000 square miles in the high plains of the interior, 8,000 of mountainous country, 14,000 of valley and plain, and about 750 square miles in the islands forming the Dahlak Archipelago in the Red Sea.

The local government is administered by a governor appointed by the Crown, and his official residence is at Asmara.

Agriculture—Live Stock—Fisheries.

Agriculturally the colony is yet largely undeveloped. Some Indian corn and sesame are raised by the natives in the littoral zone. Wheat is cultivated on the higher plains, but a full crop would probably yield not more than 10,000 tons. Some barley is also grown. Cotton is cultivated in the valley of the Barca, where the soil appears to be well adapted for its growth. This promises to become the most important of the agricultural products of the colony and it is hoped will eventually prove of immense benefit to the Italian cotton industry, which at present is almost wholly dependent upon foreign-grown fiber to supply its mills. Oranges, bananas, mandarins, and dates are grown, but of other fruit there is practically none.

The census of 1905 showed about 300,000 head of neat cattle, 750,000 sheep and goats, 30,000 horses, and 47,000 camels. These figures would doubtless be considerably increased if the census were taken to-day, especially in neat cattle.

The natives of the littoral zone in the vicinity of Massowa and of the Dahlak Archipelago are largely engaged in fishing for pearls, mother-

of-pearl, tortoise and other shells, and these articles form a considerable item in the export trade of the colony, especially mother-of-pearl.

Imports and Exports—Industries—Transportation.

Imports into the colony in 1910 were valued at approximately \$4,000,000, of which goods worth about \$3,200,000 were for local consumption and the remainder in transit. Exports during the same year were about \$2,200,000, of which \$1,400,000 were local products and the remainder in transit. Italy secures the largest share of the import and nearly one-fifth of the export trade. The principal imports are cotton tissues and yarns, machinery, iron and steel products, petroleum, olive oil, sawed lumber, mineral oils, Italian pastes, silk tissues and thread, and wine. The supply of wine in the colony is almost all of Italian production. Exports are chiefly pearls, mother-of-pearl, coffee, raw cotton, neat cattle, gums and resins, hides, flaxseed, wheat, vegetable ivory, and ostrich plumes.

The industries of the colony are almost wholly undeveloped. The natives produce with primitive means certain cotton tissues, which are said to be well made and quite highly prized, rough blankets of wool, mats of fiber of various qualities, and containers made of palm wood. Of European industries there are only a few, these being lime and roofing-tile works, ice plants, and several plants for making distilled water, certain liquors made from imported alcohol, flour mills, and the manufacture of charged waters.

The colony possesses more than 250 miles of good roads. There is only one railway, from Massowa to Asmara. From Asmara the line is to be extended as far as Cheren, a distance of 60 miles, and this will provide an outlet for the cotton raised in the valley of the Barca. The colonial government has assumed the construction and operation of this line.

Maritime, Postal, and Telegraph Services.

One subsidized line, the Società Nazionale dei Servizi Marittimi, has regular sailings every four weeks from Genoa to Massowa. Between Massowa, Assab, and Aden there is a weekly service. For those not wishing to wait for the regular steamers from Italy it is easy to reach Massowa from Naples by steamer to Alexandria, then from Cairo to Suez by rail, and from there to Port Sudan and Massowa by the Khedival Line steamers. Another route is from Naples to Suez, then by one of the steamers passing almost every day to Aden, and from Aden to Assab and Massowa by the weekly steamers mentioned above. Other steamers operated by the Deutsche Ost-Afrika-Linie run from Naples to Aden, and the Società Nazionale dei Servizi Marittimi operates steamers between Genoa and Bombay, calling at Aden. Finally, there is also a line of steamers operated by the Società Veneziana between Venice, Massowa, Aden, and Calcutta, with sailings once a month from Venice.

The colony has 11 post offices. For the interior, correspondence is carried by rail, by courier or automobile, and by mules. There is a weekly postal service between Italy and the colony via Brindisi. Correspondence from the colony for other destinations, if not going via Brindisi, is collected at Aden and sent forward from that point.

Between Massowa, Assab, and Perim there is a cable about 380 miles long. From Perim messages are transmitted by the Eastern

Telegraph Co. There is also telegraphic and postal service between the colony and the Sudan. In the interior there is a network of telegraph lines more than a thousand miles in length, and the recent opening of the powerful wireless station at Massowa places the colony in direct telegraphic communication with Italy through the station at Coltano (Tuscany), as well as with the other Italian colony, Somaliland, farther south.

The Port of Massowa—Population—Budget.

Massowa is the principal port of the colony. The city itself is situated upon an island connected with the mainland by a breakwater. Its population is about 1,300. The so-called "Commissariato," or district of Massowa, has a population of about 30,000, composed largely of Mohammedans. In 1909, 159 steamers and 1,294 sailing vessels entered the port, with a combined tonnage of 171,155. The merchandise discharged in that year was 24,711 tons. More than 13,000 passengers landed at Massowa during the same year.

According to the census of 1905 the population of the colony of Eritrea was 278,893, of which 274,944 were natives and 3,949 Europeans or of other nationalities.

The budget for Eritrea for the fiscal year 1911-12 shows that the revenues and expenditures of the colony are balanced in the sum of 10,464,444 lire (\$2,029,638), which amount, deducting the portion included in receipts and expenditures for railway work provided for by loans contracted with the Banca d'Italia, presents, in comparison with the budget for 1910-11, an increase of 166,788 lire (\$32,190).

Receipts and Expenditures—Customs Duties.

Under the caption "Rents from Government property" there merits being noticed the amount estimated from gathering the fruit of the "palma dum" (*Hyphæne thebaica*), which for several years has assumed importance in exportation and from which an income of \$6,755 is expected, while in the preceding budgets the income from this source was an almost negligible amount. Under the caption "Tax for vaccination of live stock" there is noticed the prestige acquired by the Italian vaccine institute, to which many animals from the Tigre are also conducted. Hope is expressed for a large increase in the exportation of live stock to Italy, and, in view of such eventuality and in order to organize the services necessary to guarantee the good sanitary condition of the animals, a special officer of the Italian Government has been sent to Eritrea.

In the expenditures the appropriations for the postal and telegraph services have decreased from 175,000 lire (\$33,775) to 130,000 lire (\$25,090). The smaller sum required is the result of an economy of \$11,580 which will be saved in the usual repairing necessary to the Massowa-Assab-Perim submarine cable by the opening of the radio-telegraph station at Massowa and of the greater need of \$2,702 for the other postal and telegraph services of the colony.

The receipts from customs duties have increased except for the revenues from the surtax on spirits, which are expected to show a loss of \$810, owing to the prohibition of the consumption of liquor by the natives. The revenues from all the other articles have advanced, and show a total gain of \$22,967 compared with the preceding budget.

Land Titles.

The land order approved by royal decree of January 15, 1909, is destined to facilitate agricultural production by dissipating doubt in the minds of those who desire to invest capital and contribute labor. The concessions cover about 1,400 hectares (3,460 acres), while those still to be definitely granted (although accorded in a provisional way before the decree) cover about 12,000 hectares (a trifle less than 30,000 acres). The concessions in course of regulation on December 21, 1911, were 215 in number, and the number of demands has materially increased since the land order.

[For previous articles on Eritrea see Daily Consular and Trade Reports dated Jan. 12, 1910, and Aug. 2, 1911.]

VENEZUELAN DEVELOPMENT NOTES.

[From Consul Thomas W. Voetter, La Guaira.]

Government Agricultural School.

The Venezuelan Congress will be asked to appropriate funds for the Federal school of agriculture, stock raising, and veterinary medicine established by a recent Executive decree. The decree stipulates that the school be provided with the buildings necessary for theoretical and practical instruction, boarding of pupils, installation of laboratories, model farm with its dependencies, and the fields which are required for pasture and experimental and demonstrating cultivation. The choice of a site is left to the National Congress. The Minister of Public Instruction will have charge of the organization of the school, its teaching staff, and plan of instruction.

The agricultural possibilities of Venezuela are so great and permit of so much development that the establishment of an agricultural school with model farm and experiment station as outlined in the decree promises much for the future of the Republic.

[From Consul Herbert R. Wright, Puerto Cabello.]

Building of Wagon Roads.

President Gomez, of Venezuela, has recently approved \$4,102 gold for building a wagon road between Maracay, of the State Aragua, and Ocumare, a small seaport about 10 miles from Puerto Cabello.

Gen. Leon Jurado, president of State Lara, has decreed the building of a wagon road between La Vela and Cumarebo. This road will facilitate the transportation of goods.

New Steamship Line—Wireless Stations.

President Jurado has also bought a steamboat in the United States to start a new steamship line for plying between La Vela, Venezuela, Curaçao, and Puerto Cabello. The new line will start at once.

President Gomez, of Venezuela, has just issued a decree establishing four wireless telegraph stations at La Guaira, Puerto Cabello, Maracaibo, and Cumana. Wireless companies might address Spanish correspondence to the Department of Fomento (Promotion) at Caracas, which is in charge of the installment of the said stations, or to Señor Manuel Ayala, 18 Broadway, New York City, who is the purchasing agent of the Venezuelan Government.

CONSTRUCTION WORK ABROAD.**CANADA.**

[From Consul Frederick M. Ryder, Rimouski, Quebec.]

River and Harbor Improvements.

The Government has made a number of appropriations for river and harbor improvements in this consular district. A breakwater is to be constructed at Rimouski, approaches to the Government wharf are to be dredged, and water pipes are to be extended from the town limits to the end of the wharf. Other improvements are the enlarging of the wharf at Riviere-du-Loup, dredging at Isle Verte, the construction of a breakwater at Mal Baie, a new pier and other improvements at Trois Pistoles, and the enlarging of the wharf and deepening of the approaches at Tadousac. An additional appropriation of \$100,000 has been made for the deep-water wharf at Gaspe. New Government buildings are to be constructed at Gaspe, Matane, and Murray Bay during 1912, and the public highways are to be rebuilt.

MEXICO.

[From Consul Wilbert L. Bonney, San Luis Potosi.]

New Gas Plant, Tramway Improvements, Electric Power Plant, and Railway Terminals.

Plans for the construction of a gas plant here by American interests were formed late in 1911, under an amended franchise, and work on the plant is expected to start soon. The tramway in San Luis Potosi was purchased during the year by British interests and many improvements are planned.

A Canadian company with a large capital secured a concession for the utilization of water power in the eastern part of this State, and as soon as certain litigation is terminated it will erect a large electric power plant, from which power will be transmitted to San Luis Potosi and other cities.

The new station and freight house of the National Railways are nearing completion, and lands have been purchased for shops and general terminal facilities, including oil reservoirs. The State recently granted a subvention of \$100,000 to assist this work.

PANAMA.

[From Consul James C. Kellogg, Colon.]

New Cigar Factory—Agricultural Development Company.

The La Perla Cigar Co. (Ltd.) expects to move into its new factory, now in course of construction, by June 1, 1912. This factory is built of concrete and will be the finest cigar-making plant on the Isthmus. The general manager of this company, Mr. Charles Klinkert, is an American, as are a number of the stockholders. At present the cigars of this company are all handmade, but as the demand for its product is steadily increasing, it will soon be compelled to install cigar-making machinery. American manufacturers of such machinery should therefore get in touch with this company.

The Panama Development & Manufacturing Co., of Cativa Bay, Province of Colon, has been incorporated under the laws of the Republic of Panama, with a capital of \$250,000 gold. The stock is

owned principally by American canal employees. The plans of the company include the growing of sugar cane, cacao, coconuts, bananas, and vegetables; the raising of poultry, hogs, and beef and dairy cattle; and the production of sugar, sirup, alcohol, rum, cheese, butter, canned fruits, preserves, meats, catsup, vinegar, etc. The company has been granted 2,500 acres of land free by the Panama Government and has the right to purchase 15,000 acres adjoining for \$1 per acre. This company expects soon to let the contract for a sugar mill with a capacity of 1,000 tons of sugar per day.

CUBA.

[From American Minister A. M. Beaupré, Habana.]

Transistland Canal for Shortening Route to Panama.

The local press is devoting some space to a project for constructing a trans-Cuban canal for shortening the distance between Atlantic ports of the United States and Panama. According to reports published, it is planned that a sea-level canal shall be built from Cardenas on the north to the Bahia de los Cochinos on the south coast, of the same width and depth as that traversing the Isthmus of Panama. It is reported to be the intention of the promoters that the canal shall be purely Cuban and that the necessary bonds shall be floated in Habana.

Among the engineers and promoters of the enterprise are Joaquin Chalons, until recently secretary of public works; Luis G. Estefani; and Dr. Carrera Justiz. The canal as now planned would cross one of the widest parts of the island, but the formation of the country is said to be such as to more than compensate for the increased distance over other possible routes. It is said that the canal could be built for \$90,000,000. [Maps showing the routes of the proposed canal are available from the Bureau of Manufactures.]

BRAZIL.

[From the Review, Rio de Janeiro; sums stated represent United States currency.]

Industrial and Municipal Construction Work.

The drainage system on the island of Paqueta, being installed by the City Improvements Co., is now approaching completion. What remains to be done is to erect the stations.

Railroad extension.—The President of the State of Sao Paulo has signed a decree authorizing the Sao Paulo Railway to build a 20-mile line from Atibaia (on the Campo Limpo to Braganca section) to Piracaia.

Construction company's expansion.—The Companhia Materias de Construccao, of Rio de Janeiro, has issued \$135,000 in new debentures, of which \$64,000 is for redeeming a previous issue, the balance to be used for acquiring furnaces of a new type and machinery for the making of bricks and tiles, and for the substitution of electric for steam power in the factory.

Street and park improvements.—It is stated that the prefect proposes to widen the Avenida Atlantica, which runs from Leme to Igrejinha, and lay fresh asphalt over the greater part of it; pavements for pedestrians will be placed on either side, and the road made thus convenient for the public. During the last year the actual area of asphalt was no less than 423,733 square meters. The department of gardens and woods has also planted hundreds of trees in the streets and squares of the city. The prefect announces that a flower show will take place next September, and that before that date he proposes to hold a gardening exhibition. Both these will take place in the Quinta da Boa Vista, where he is also desirous of establishing a zoological garden.

New building corporation.—An important combination has been formed between leading British and French groups for carrying out Government financial operations

and public works, principally in Brazil and other parts of South America. The nominal capital of this Anglo-French and South American combination is \$5,000,000, and the first subscribers include Lord Furness (chairman); S. Pearson & Son; Societe Centrale des Banques de Provinces, Paris; the Caisse Commerciale et Industrielle de Paris, which has already carried out important financial operations for the Government of Brazil and elsewhere; the South American Railway Construction Co., of London, which is now constructing important railways for the Brazilian Government and other works in Brazil. The commercial interests of the corporation will be represented at Rio de Janeiro by Hugh Stenhouse, for many years general manager of the City of Santos Improvements Co., which position he resigned to represent the present combination and other interests in Brazil.

ARGENTINA.

[From the South American Journal.]

Contracts for Railways.

The Government of the Province of Salta had published the conditions on which it proposes that economic railways serving districts in the Departments of Oran, Rivadavia, and Anta, which are at present outside the range of the national railways, shall be constructed. The lines will be constructed by contractors selected by the Government, and the cost of construction and also of rolling stock is to be paid off within 25 or 30 years, during which time the provincial government, as well as private individuals and firms benefiting directly by the line, would pay a proportional tax. It is considered impossible to undertake the scheme without the imposition of this tax. Should the National Government find it convenient to purchase the lines, the payment would be devoted to works generally benefiting the province. The gauge of the lines is to be the same as that of the national lines. All costly and elaborate work is to be avoided, and the stations are to be of simple construction. It is estimated that the cost per kilometer would not exceed \$10,000 gold.

RUSSIA.

[From Consul John H. Grout, Odessa.]

New Quays at Odessa.

As the present accommodations of the commercial port of Nikolaief, consisting of one Government granite quay and two private wooden quays, are insufficient for the growing trade of the port, the Nikolaief town council in 1910 decided to construct a quay adjoining the one owned by the Government. The work of dredging, pile driving, and filling in was actively carried on during 1911, and the solid work is being vigorously pushed during the present spring. This quay will provide accommodations for seven steamers, and it is proposed to fit it up with the latest mechanical appliances for the loading of grain. It is as yet impossible to say just what the equipment of the quay will be.

The St. Petersburg International Forwarding & Storage Co., which owns a piece of the foreshore adjoining the town's property, is considering the construction of a quay for the accommodation of about four steamers. Should this project materialize, special facilities for handling iron will probably be made a leading feature.

NETHERLANDS.

[From Consul General Soren Listoe, Rotterdam.]

Harbor Works on the Maas River—City Improvement in Rotterdam.

During 1911, 808,308 cubic yards of earth were removed in the dredging of the new harbor, Waalhaven, and on January 1, 1912, the surface water covered 140 acres, of which 116 acres had a depth of 28 feet. [This harbor was mentioned in Daily Consular and Trade Reports for May 6, 1911.] The city government has purchased

ground on the right bank of the Maas River, near Schiedam, where it will dig out three small harbors, 160 by 2,300 feet, 400 by 1,800 feet, and 330 by 1,100 feet, respectively. Dredging will be commenced during the present year, and the city expects to spend about \$3,000,000 on building the harbors and the necessary quays.

A movement for the reforming as well as the beautifying of Rotterdam has been inaugurated by the present burgomaster, and has met with the approval of the city council and the citizens. As a link in the various improvement works contemplated, the city has purchased or expropriated 280 houses along part of the "Coolsingel," one of the city's canals, covering about 6 acres of ground and sheltering 2,400 people. With the principal view of doing away with certain slums, these houses are being demolished, and the erection of a new city hall and a fine post-office building on the site are contemplated. The "Coolsingel" will be filled up and a boulevard laid out. Plans for the new buildings will soon be called for, but it has not yet been decided whether or not consideration will be confined to native architects and contractors.

SWITZERLAND.

[From Consul George Helmrod, Berne.]

Swiss National Exposition—Railway Projects—Municipal Improvements.

Preparations are being made for the Swiss National Exposition, to be held in Berne in 1914, and the conditions under which American manufacturers may possibly exhibit are being studied by the commission in charge. In addition to this exposition, the completion of the Loetschberg Railway through the Bernese Alps and the proposed reborring of the Hauenstein Tunnel on a lower base, on the trunk line between Berne and Basel, are expected to bring additional prosperity to Switzerland's capital city.

Among the new projects proposed or in process of construction here are a new municipal slaughterhouse, an extensive municipal hospital, several hotels, the rebuilding and enlargement of the passenger and freight terminal stations of the Swiss Federal Railway, a new Volks house, a new Kursaal, and an extension of the municipal street railway line. The more important banks have either rebuilt or erected new homes with modern equipment. Ordinary building speculation is restricted, however, by the unwillingness of banks to loan money for this purpose to any but first-class firms.

SWEDEN.

[From Consul Stuart J. Fuller, Gottenborg.]

Harbor Improvements at Gottenborg.

Much was accomplished at Gottenborg during 1911 in dredging, piling, and building quays at the new harbor basin designed for the handling of bulk cargo. No date has been set for the opening of this harbor. The new basin for fishing craft, opened in 1910, was enlarged, and the dredging of the harbor entrance from a depth of 24.6 feet to a depth of 27.9 feet was about half completed during the year. A further extension of the basin for fishing craft, to cost about \$145,000, and an extension of the Stigberg Quay, to cost about \$120,000, were also decided on.

TURKEY.

[From the Near East.]

Proposed "Tube" Railway.

It is understood that the Turkish Council of State is studying a project for an underground line to connect Stambul with Pera under the Golden Horn. English engineers are expected in Constantinople shortly in connection with a scheme to build a double tube connecting the termini of the Oriental & Anatolian Railway, the proposal being to lay a double tube between the extreme point of Stambul and Haidar Paasha under the Bosphorus. A suspension bridge across the narrowest part of the Bosphorus, to connect the European and Asiatic railway systems, has at various times been suggested; but the tube scheme, if it ever materializes, has decided advantages, in that it touches the very heart of the traffic.

Application has also been made for a concession for an electric railway from Galata to Roumeli-Fener, at the mouth of the Black Sea, and has recently received the approval of the Council of Ministers.

[Reuter dispatch from Sofia.]

Railroad Connection Between Turkey and Bulgaria.

The semiofficial "Mir," commenting on the fact that the Ottoman Government has at last consented to the construction of a railway line between Kumanovo and Kustendil (by which Sofia will be brought into railway communication with Saloniki), says that this step is of great importance for the two countries concerned.

SOUTH AFRICA.

[From Consul Nathaniel B. Stewart, Durban, Natal.]

Extension of Electric Light and Power Systems.

The boroughs of Pietermaritzburg and Ladysmith, Natal Province, propose shortly to extend their electric lighting and power plants. A draft ordinance for each, to be introduced in the provincial council, authorizing loans for the extensions, was published in the Provincial Gazette of March 21, 1912.

The proposed expenditure on the Pietermaritzburg extension is \$206,826, and on the Ladysmith extension \$58,398.

JAPAN.

[From Consul George N. West, Kobe.]

Extension of Kobe's Water System.

The subsidy for the extension of the Kobe waterworks [an account of which was published in Daily Consular and Trade Reports on Apr. 15, 1911] has been passed by the Diet. The cost is estimated at \$4,975,000 (United States), of which sum \$1,215,000 is to be provided by the national treasury, payments being spread over a term of 12 years. The work, which will probably be undertaken during the current spring, is to be completed within eight years. Any communications respecting the furnishing of supplies should be addressed to Y. Senzaki, Department of Supplies, City Office, Kobe.

[From Consul Carl F. Deichman, Nagasaki.]

Improvements in Shipyards of the Nagasaki District.

The Mitsu Bishi Dockyard and Engine Works have obtained permission from the Japanese Government to reclaim about 470,000 square feet of land from the harbor in front of the shipyard. This land will be used for the extension of the company's works, to meet the requirements for building a 27,000-ton battleship cruiser for the Japanese Navy. The same company is also going to build a small

shipyard near Shimonoseki, to take care of the docking and repairing of small steamers in those waters. Vessels up to 3,500 tons will be accommodated.

Extensive improvements in the yards, docks, and machine shops are being made at the Government navy yard at Sasebo, about 46 miles north of Nagasaki. The large wharf is about half completed, and when finished will be the largest of its kind in the Orient, accommodating eight large battleships at one time. It will be connected with the railroad. The construction of a dry dock 777 feet long, 111 feet wide at the bottom, and 38 feet deep is about completed. This dry dock will accommodate ships of 30,000 tons, being the largest in the Orient. The engine works, machine shops, foundry, etc., are being extended to facilitate the execution of all kinds of work at the yard.

[From the Japan Herald.]

New Harbor Construction.

A new program of harbor construction for Tokyo has been completed and is now in the hands of the chief of the river and harbor department of the Tokyo municipality. According to the new scheme the mouth of the Sumida River is to be included within the harbor limits to facilitate connection between the harbor and the rivers and creeks in the city. The work is estimated to be completed in 12 years, and the expenditure is estimated at \$18,500,000. Work is to be divided into two periods, the first term covering eight years. During the first term the harbor-construction program is to be almost completed and in the second term the construction of docks, reclamation of foreshore, and dredging work is to be carried out. The actual amount of capital required is expected to be about \$6,000,000 to \$6,500,000, as about 74 per cent of the total expenditure may be covered by the sale of reclaimed ground. Mr. Nanbu, who is commissioned by the Tokyo municipality to investigate the economic value of the proposed harbor, states that the trade of Yokohama would not be affected by the construction of the Tokyo harbor, as the objects of the construction of a harbor at Tokyo are quite different from those of Yokohama. Moreover, the foreign trade of Yokohama will grow even more prosperous on the completion of the Panama Canal. The harbor of Tokyo will be close to the business quarter of the city.

GOLD MINING NOT ENCOURAGING IN BOLIVIA.

[From American Minister Horace G. Knowles, La Paz.]

Many American citizens are coming to Bolivia in search of gold, being misled by what is now stated to be a fake letter signed by one Ferguson. Unfavorable reports are brought by miners who have returned from Tipuani and the outlook is not encouraging.

According to advices received at this legation numerous Americans in the western part of the United States are preparing to come to Bolivia on the strength of these false reports. This warning should deter them from embarking on such hazardous undertakings. A further report will be made in the event that any of the prospectors whom the Bolivian Government has sent to various districts are successful in their search for gold.

European Agricultural Tour.

A second annual European agricultural tour under the auspices of the Bureau of University Travel, Boston, Mass., is announced for this summer under the direction of Dr. Adolph Eichhorn, a veterinary inspector in the Bureau of Animal Industry, Department of Agriculture, at Washington. He will be assisted by Hon. Paul De Vuyst, Director General of Agriculture for Belgium. Among those who have arranged to take the trip are editors of farm journals and members of agricultural experiment stations in various parts of the country.

ASIA MINOR CROP PROSPECTS.

[From Journal of the Chamber of Commerce, of Smyrna, Turkey.]

Sultana Raisins.

According to forecasts, the produce of this year's crop of sultana raisins will be below the average on account of the damage suffered by the plants in 1910 from peronospera. The unusually high temperature of January produced a rising of the sap and a tendency to bud at a time when the vineyard plains were liable to frosts. Probably even under normal conditions the crop will not exceed 800,000 cantars (cantar=125 pounds), as against an average yield of 1,200,000 cantars.

Valonia Dycstaff.

The yield of the 1911 valonia crop, which is almost completely gathered, is estimated at 900,000 quintals, as against a normal crop of more than 1,600,000 quintals (presumably the metric quintal of 220.46 pounds). The quality is, on the whole, inferior.

Opium Output.

Should all go well, it is generally reckoned that we shall have an opium crop of over 7,000 cases, of 160 pounds per case, including the Saloniki crop. The visible stock on this market in first and second hands is about 700 cases, but we believe that 200 to 300 more can be produced if wanted. Future prices depend upon the crop, also on the demand from consumers; but, whatever the outturn, we are not at all inclined to think that this year we shall see anything lower than \$3.65 to \$4.40 per pound.

Reduced Planting of Tobacco.

It is rather early to say much about the new crop, but from all appearances it promises to be one of probably 4,000,000 to 5,000,000 oke (oke=2.8215 pounds), providing the weather conditions are favorable. The planting is about half of that of last year, as the planters lost money, and owing to there being no hope of getting money advances from the merchants on account of the crisis.

Olive Oil.

Next season's crop is not likely to be so big, as a record year such as the last is usually followed by a poor yield. Present prospects point to next season's crop being an absolute failure.

COMMERCIAL GROWTH OF NYASALAND.

[From Consul George A. Chamberlain, Lourenço Marques, Portuguese East Africa.]

In a report on the Companhia do Nyassa (the Nyassa Co.), a chartered company operating in Mozambique Province, with headquarters at Porto Amelia on the Bay of Pemba, its progress is described by the African World. Some notes therefrom follow:

The territorial revenue increased from \$29,199 in 1897 to \$309,509 in 1910. In 1897 there were only two real centers of European occupation, Ibo and Palma (Porto Amelia), both on the coast. The company now has 58 posts, nearly all centers of settlement and scattered throughout the 100,000 square miles of territory between the coast and Lake Nyassa. The exports for 1910 aggregated \$398,621 and the imports \$580,000. The imports are largely made up of cotton cloths, foodstuffs, and tobacco, and the principal exports are crude, native products, such as peanuts, low-grade rubber, wax, ivory, dried fish, etc.

Big Prospective Canadian Crops.

There is at present a prospect of a 200,000,000-bushel wheat crop in western Canada this year. This statement was wired from the Minister of Interior at Ottawa to Lord Strathcona, Canadian High Commissioner in London. The dispatch continues:

Saskatchewan will have 2,303,226 acres of new land under crop this season and 2,188,118 acres of summer fallow. This large acreage is in ideal shape for a bumper crop. In some parts of western Canada the unusual condition exists this spring of seeding, thrashing, and plowing going on practically at the same time.

The Canadian Pacific Railway Co. proposes to establish 25 demonstration farms in western Canada to prove the efficiency of mixed farming.

THE BETHLEHEM MOTHER-OF-PEARL INDUSTRY.

(From Vice Consul Lewis Heck, Jerusalem, Syria.)

The chief industry to-day of the town of Bethlehem in Palestine is the manufacture of articles of religious devotion and ornaments from mother-of-pearl. The methods and tools used are mostly quite primitive in character, as are also the buildings in which the workmen carry on their trade. The principal products are carved shells on which religious scenes are depicted, beads, and rosaries. The material known as "pearl waste" from which the two latter products are made is very largely imported from the United States, and the American market also is the largest purchaser of these goods. The large carved shells are sold mostly to tourists in Jerusalem and Bethlehem, and since the demand for them is not so good as for beads and a higher grade of workmanship is required to produce them, this side of the industry is losing ground to the manufacture of beads. This report will deal entirely with the latter part of the business.

Manufacture of Beads.

A bead workman's outfit is primitive, consisting of files, borers, and a simple wooden device for holding the irregularly shaped pieces of pearl waste. This last is made of a short, round piece of wood sawed in half lengthwise, fastened together at one end, and encircled by a loose iron ring. The piece of pearl shell is placed between the loose wooden ends and the ring is hammered toward it until the grip is tight. The workman then files the part of shell which extends to the desired diameter, it is reversed in the holder, and finally a rounded piece of perhaps 1 to 3 inches in length is secured. When a number of these pieces have been prepared they are cut to bead size, a hole is bored in each bead, and it is rounded to the desired shape. Then to give the beads a smooth surface they are placed in special crockery vessels with a little water and are kept in motion in these vessels, rubbing against the sides and each other until they are smoothed, but not polished. To give them a gloss and sheen, they are finally placed in boiling water, to which a weak solution of nitric or muriatic acid is added, and when removed from this they are passed through a succession of cooling waters. There are three usual shapes—those flat on two sides, round, and oval.

These beads are strung on cords, silk, or wire, and always on the latter in the case of rosaries. For these last also crosses and hearts are made of mother-of-pearl, with a small metal figure attached to the cross. Silver crosses and hearts are used to a slight extent. Samples of the different shapes and sizes are forwarded [and will be loaned to interested firms by the Bureau of Manufactures].

Wages, Production, and Exports.

The wages of the bead workmen are not very high. Those who make the beads earn from 32 to 65 cents per day. The women and girls who string them receive from 12 to 25 cents per day. As stated, the carved-shell work is practically dying out, but the demand for bead goods is in excess of the supply, and better prices are being realized all the time. The steady demand and the emigration of young men to avoid military service have led to a considerable rise in wages during the past year or two.

The declared exports of mother-of-pearl articles to the United States and dependencies during the last five calendar years have been

as follows: 1907, \$23,650; 1908, \$15,428; 1909, \$16,222; 1910, \$29,251; 1911, \$29,628. It is impossible to obtain more than a fairly close approximation of the total annual production of these goods, as many are carried away by tourists or are shipped by parcel post, and so do not enter the customs statistics or other records. Of an estimated production of from \$150,000 to \$160,000 in 1911, the principal purchasers were the United States, France, the rest of Turkey, Germany, Austria, Italy, and Great Britain, in the order named.

Tools and Mechanisms Used.

The files used are mostly of German and Belgian manufacture with some of English make. With the exception of those employed for the finest work, which are imported new, old files are brought in and recut here. Formerly this was done by hand, but a machine was recently secured from Europe for resharpening the old files. It is claimed that these resharpened files yield better results than new ones, and they are much less expensive. The borers are made locally from steel rods especially imported for the purpose. The white-metal wire for the rosaries and the silver accessories are chiefly of French manufacture. The only possible opening for American goods seems to be in connection with machinery for bead making or for a small amount of files. This consulate will be glad to receive catalogues from any firms which manufacture tools or machinery suitable for this industry; and for the convenience of American houses which might desire to import mother-of-pearl articles a list of the principal local manufacturers and dealers is forwarded [obtainable from the Bureau of Manufactures].

REVISED COMMERCIAL CODE OF JAPAN.

American Minister Charles Page Bryan has forwarded from Tokyo a summary of the more important changes in the Japanese Commercial Code as revised by the Imperial Diet last year. This summary will be loaned by the Bureau of Manufactures. In commenting on the changes in the code Minister Bryan says:

As regards the effect on American interests, one of the most important provisions is the amendment to article 170. Formerly each of the directors of a company was entitled to represent it, even though contrary provisions were inserted in the company contract; thus it was possible for a single director to take action in regard to a company's property or other matters not in accord with the desires of the other directors. This was particularly troublesome in the case of companies composed of both Japanese and Americans. Under the new law, directors who shall act for the company may be designated either by the company contract or by a general meeting of shareholders and directors other than those so designated may not represent the company. However, if no such designation is made, each of the directors has authority to represent the company.

Articles 652-2 to 652-16 contain definite provisions regarding the right of demanding salvage money. As salvage was not mentioned in the previous code, these should be of interest to American ships. The other amendments are mainly concerned with the more minute regulation of companies, insurance, etc., and prescribe severer penalties for violation of the law. They are regarded as improvements upon the former articles and as beneficial to legitimate Japanese business interests. They will be equally beneficial to American business interests.

German pianos were sold abroad last year to the value of \$10,500,000 against \$9,000,000 in 1910 and \$7,900,000 in 1909.

WORLD INDUSTRIAL NOTES.

(Collated from European papers.)

Increased Rand Mining Profits.

A cablegram to England from Johannesburg states that the mines of the Witwatersrand alone (i. e., excluding outside mines) crushed during March 2,163,998 tons of ore, giving a total profit of \$6,300,969. This sum, however, includes the value of the whole of the gold reserves formerly published separately by certain of the mines, amounting to \$1,128,715. Eliminating this amount, the actual working profit for the month shows an increase over the previous month of \$319,422, the tonnage crushed being 183,602 more than for February. The average yield for March was \$6.71 per ton, as compared with \$6.87 in February; the working costs were \$4.60 as compared with \$4.66 during February, and the profit per ton was \$2.19, or a decrease of 4 cents as compared with the previous month. Compared with March, 1911, the tonnage crushed shows an increase of 203,320 tons, and the profit an increase of \$113,944.

Research Work on India Rubber.

Machinery is to be installed at the Manchester School of Technology for practical instruction and research work on india rubber, and the Manchester Corporation has accepted the tender of F. Shaw & Co. (Ltd.) for the supply of experimental plant for the equipment of a laboratory where research upon broad lines will be carried out. During the last two years courses of lectures have been given in the school upon the chemistry of rubber, and these are now to be supplemented by practical work.

Scottish Emigration to Canada.

Six vessels sailing from Glasgow in the last week of April carried 6,000 emigrants from Glasgow to Canada. As the emigrants are mostly Scottish agriculturists and artisans, this means the depletion of the country's population by about 6,000 within a week.

New Zealand's Prosperity.

A dispatch from Wellington says that Mr. Mackenzie, the prime minister, speaking at Auckland, said the year which ended on March 31 had been a record financially. The revenue was \$53,828,000, and the expenditure \$50,324,000, leaving a surplus of \$3,504,000, while the government investments were returning more than sufficient to pay the interest on all moneys borrowed in New Zealand and abroad. During the last few years \$3,500,000 of treasury bills had been paid off out of the revenue. Alarmists had complained of the closeness between the exports and the imports, but, as a matter of fact, during the last 20 years the exports had exceeded the imports by \$300,000,000, and the internal wealth of the country had increased by \$1,022,000,000.

Heavy German Steel Exports.

According to the Imperial Statistical Board the German imports of iron and steel and manufactures thereof in the first three months amounted to 163,000 tons, as against 135,000 tons in the similar period in 1911, or an increase of 28,000 tons. The exports reached 1,428,000 tons, as contrasted with 1,281,000 tons in the equivalent quarter last year, being an augmentation of 147,000 tons. These figures show on the balance of imports and exports a net gain of 119,000 tons for the first three months of this year. Pig iron represents an increase of 70,000 tons, and heavy rails one of 10,000 tons, whilst an advance also took place in joists, sheets, wire rods, railway sleepers and fishplates.

Small Holdings in Servia.

In the last Skupschtina, consisting of less deputies than the present House contains, there were 52 peasant agriculturists. In respect to the last named, it is to be remarked that Servia is essentially an agricultural State, over 80 per cent of the population being engaged in agriculture and cattle breeding. But there are in Servia no large estates belonging to a single tenant, as in western Europe.

According to the census of 1897 there are in round figures 295,400 landed proprietors, nearly all peasants. Of these only three persons possess each more than 300 hectares of land; 80 possess from 100 to 300 hectares each; 400 from 60 to 100 hectares; 10,000 from 20 to 60 hectares; 40,000 from 10 to 20 hectares; and the remaining 145,000 peasant landed proprietors possess each 3 to 10 hectares of land. The existing system is that of small agricultural holdings. Every peasant possesses a piece of ground, however small it may be, on which he lives, and which he cultivates himself, aided by the members of his family.

Rise in Wax Prices.

The Scottish mineral oil companies intimated an advance of $\frac{1}{2}$ cent per pound in the price of paraffin wax, making the basic price $4\frac{1}{2}$ cents per pound, or 12 $\frac{1}{2}$ per cent more. It is understood that this advance is the result of a better understanding arrived at with the Standard Oil Co., while the Galician output is also declining. This advance, in conjunction with the advances recently announced in naphtha and lubricating oils, materially alters the position of the Scottish mineral oil companies for the better. The present output of paraffin wax in Scotland amounts to about 25,000 tons per annum.

Dear English Strawberries.

The mild weather of the early spring has hastened the development of strawberries and other fruit, and promises to make this year's strawberry harvest a notable one, provided that no severe frosts occur. Baskets of strawberries, each containing eight to nine very large berries, were on sale in London in the latter part of April at 20 cents, and the fruit had none of the flavorlessness inseparable from the forced plants.

DURBAN'S MUNICIPAL TRAMWAYS AND TELEPHONES.

[From Consul Nathaniel B. Stewart, Durban, Natal, South Africa.]

Durban's municipal tramways, with 32 track miles, represent an investment of \$2,150,166. The gross income in the fiscal year 1911 was \$553,360, and net profit \$80,730, or 3.75 per cent. The fare is 3 cents for each tram stage with tickets, or 4 cents cash. An extension of $1\frac{1}{2}$ route miles is now being completed in the residential district.

Durban has the only municipal telephone system in the Union of South Africa. All others are owned and operated by the Union Government. The number of telephones in use is greater here in proportion to population than in any other town in the Union from which figures are available, the following being a comparison of several of the larger towns on July 31:

	White population.	Number of telephones.
Durban.....	32,000	1,928
Johannesburg.....	122,000	3,450
Cape Town.....	30,000	1,400
Pietermaritzburg.....	14,000	874

Durban is also the only city of the Union of South Africa which uses American telephones. All other cities use the Ericsson, a Swedish telephone. Durban's revenue from telephones in the fiscal year 1911 was \$88,162, of which \$21,384 was surplus over expenditures.

AUTOMOBILE RACE IN ITALY.

[From Consul Hernando de Soto, Palermo.]

An international automobile race is contemplated for May 26 and 27, 1912, under the auspices of the daily paper *L'Ora*, of Palermo, and the *Gazzetta dello Sport*, of Turin. The race, starting at Palermo, will go through Messina, Catania, Syracuse, Terranova, Girgenti, Marsala, and Trapani, finishing at Palermo, the total distance being 652 miles.

All types of automobiles are admitted, but must have at least two seats. The maximum time prescribed to cover the distance is 48 hours. Applications, which must be accompanied by 100 francs (\$19.30) should not be addressed later than May 19 to the *Direzione Giornale L'Ora*, Palermo, Italy.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8783. Silk.**—An American consular officer in the United Kingdom reports that a business man in his district has applied for the names of American silk manufacturers. Transmitted with his request is a sample of silk (obtainable from the Bureau of Manufactures), which he claims is of American origin. He also adds that he is desirous of purchasing better qualities of silk than that submitted. The inquirer states that he has been established in business a number of years, buys in considerable quantities, and is in a position to wait a reasonable time for the production of such textiles as he may wish to purchase.
- No. 8784. Automobile truck.**—A resident of a South American country has just obtained from the local Government a concession to establish an automobile service. It is proposed at present to establish two lines, 36 and 15 miles long, respectively. These routes are over a level country with a hard, chalky soil and a few sand beds. The roads are very primitive. The person holding this concession would like to get bids on a type of 3-ton gasoline truck, suitable for use on the primitive roads of the country. He will probably order one or two at first, and if the experiment is successful orders for more trucks will soon follow. Correspondence may be in English or Spanish. Prices should be quoted f. o. b. New York.
- No. 8785. Buying agent in United States.**—A large native drug company in a Far Eastern country doing a general merchandise business and having a number of branch houses, has applied to an American consulate for connections with responsible buying agents in the United States. This concern purchases upward of \$100,000 worth of foreign goods each year, mostly from England, and will, if prices, quality, and shipping arrangements are equally good, give this business to American houses. Buying agents in the United States should address this company for full particulars as to character and varieties of goods wanted and information regarding desired methods of shipping, etc.
- No. 8786. School supplies, stationery, and job-printing accessories.**—An American consul in the Far East reports that a firm in his district has bought out its competitor in that section of the country in stationery and school supplies, books, and printing business, and has accordingly extended and enlarged its business. American dealers in school supplies, stationery, and job-printing accessories desirous of doing business should address their catalogues, price lists, etc., to this firm.
- No. 8787. Electric-lighting plant.**—A municipal council in China is at present considering a proposition to install a small electric-lighting plant on an island which has a native population of 8,000 and a foreign population of about 200 persons. A plant of about 1,000 lights capacity will be ample. Full particulars may be secured by addressing the secretary of the council in question.
- No. 8788. Salted and dried fish and marine products.**—A report from an American consul in the Far East states that a city in his district imported from abroad during 1911 an aggregate of \$500,000 worth of salted and dried fish, dried shrimps, dried prawns, and bêche-de-mer. American dealers interested may secure particulars by addressing the consulate in question.
- No. 8789. Sheetings.**—A commercial agent of the Department of Commerce and Labor reports that one of the largest and most important cotton-goods dealers in Turkey is very anxious to purchase American sheetings. The qualities which are particularly wanted are 36-inch, 3.50 and 3.75 yard goods with 64-68 picks per inch. The same construction, but in all widths from 30 to 54 inches, can be sold. This is a splendid opportunity for American manufacturers to place their goods on that market. Samples and prices should be submitted with the first communications.
- No. 8790. Remnants of cotton goods.**—The members of several firms in a city of the Near East have informed one of the commercial agents of the Department of Commerce and Labor that they are anxious to get in touch with American firms selling remnants of cotton goods.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

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SMOKE ABATEMENT AND FUEL ECONOMY.

[From Consul General John L. Griffiths, London.]

The International Smoke Abatement Exhibition, held in London March 23 to April 4, to show mechanical devices for abatement of the smoke evil and to develop the best methods for abating the evil, was well attended, and the papers read at the various conferences were given much space in English newspapers.

Only in the last 30 years or so has there been any systematic study of the smoke problem and any determined effort to minimize the smoke nuisance. The law dealing with the subject in the United Kingdom is the public health act of 1875. One of the speakers at the conference stated that the smoke sections of said act had mainly been so construed as to make them ineffectual, and that the only provision in the act upon which proceedings could be successfully based, in his opinion, was the one providing that "any chimney, not being the chimney of a private dwelling house, sending forth black smoke in such quantity as to be a nuisance" shall be deemed a nuisance, subjecting the offender to prosecution.

In a report of the Coal Smoke Abatement Society (under whose auspices the late exhibition was held) states that 1,000 chimneys were under observation for 12 months and that, although previously they emitted black smoke, and the proprietors stated that it was impossible not to do so, nevertheless during the time under surveillance no black smoke was perceptible. In another instance a manufacturer who had been compelled to introduce effective combustion furnaces through the continued prosecutions of the society expressed his approval of the change because of the great saving effected in his fuel bill.

Eliminating the Smoke from Dwelling Houses.

A primary object of the exhibition was to educate the general public who have apparently been very indifferent to the injurious effects of smoke on health and buildings and also on animal and vegetable life. Half the smoke of London, it is estimated, comes from dwelling houses, the occupants of which are not liable to prosecution, and it is with regard to such buildings, as the law now stands,

that missionary work must be done if the smoke nuisance is to be effectually combated in the English capital.

A great deal can be accomplished by the use of anthracite coal, gas, patent fuel of various kinds, mineral oil, and electricity. Coal is almost universally used on British railroads, although one or more companies are now experimenting with oil fuel on locomotives, yet it is unusual for any great volume of black smoke to issue from the locomotives, the color being ordinarily white or gray; still it is claimed that yellow, gray, brown, or light-colored smoke is frequently as harmful as black smoke. Only the emission of black smoke makes a prosecution possible.

With the domestic grates, however, it is not illegal to burn the softest and smokiest coal, so that the only course open with reference to this class of offenders is to bring moral suasion to bear upon them and to educate the householder to a realization of the injury caused by smoke and the benefits in the way of cleanliness, improved health, and greater economy that would result from its elimination. The use of improved combustion grates and of harder coal fuels or of gas or electricity would soon cause a great lessening of the nuisance. The average English householder, however, is strongly attached to the open glowing coal fire.

Extending Use of Gas Appliances.

There is, however, an increasing use of gas heating, cooking, and hot-water appliances throughout the country. There has been a marked increase in the number of these appliances sold, hired, or loaned to consumers by gas companies in and near London.

While 46,000 of such appliances were in use in 1891, 445,000 were in use in 1901, 998,000 in 1906, and 1,494,000 in 1911. The figures show that nearly 1,500,000 chimneys, which would otherwise be sending forth black smoke and dirt, no longer constitute a nuisance, and the number is being added to at the rate of nearly 100,000 each year.

The efforts of the Coal Smoke Abatement Society, in greatly reducing the volume of smoke, have been instrumental in making black fogs rare in London. A few years ago these fogs were quite frequent in London in winter, and for several days at a time the city itself and the outlying suburbs were covered by a dark, black pall, sometimes high in the air, but more frequently descending and forming a thick, dirty, and greenish-yellowish substance through which the people had to travel. Fogs still occur in London, but only occasionally, and not for several years has there been an old-fashioned fog when torch bearers had to be employed to indicate the way.

Efforts of Cities and Manufacturers.

In many English cities an effort is being made to deal systematically and scientifically with the smoke problem. In Sheffield, for example, the steel manufacturers have appointed a committee to investigate the possibilities of replacing the furnaces now generally in use with gas and electrically heated furnaces, while in London, Glasgow, Liverpool, Manchester, and other industrial centers, classes have been successfully held for educating stokers as to the best method of doing their work.

It was claimed at the conference that cheap bituminous coal could be used in a well-designed and carefully operated boiler installation without injurious effects from the smoke.

Production of Transportable Heat Units in the Mine.

The feature of the conference was the presence of foreign delegates, and it was evident that English appliances and methods of attacking the smoke problem have attracted widespread interest. Sir William Ramsay, in an address, said it did not seem impossible that a shaft could be sunk to the coal-bearing strata, admitting sufficient oxygen necessary to burn the coal and that the gas thus produced could then be drawn off to be utilized for creating electrical power at the "pit head," from whence it could be distributed. In this way, he claimed, coal mining and coal smoke could be entirely done away with by converting coal into gas in the bowels of the earth. Among the resulting advantages he mentioned that electrical power for railroads and industries could be obtained at one-fifth, and possibly one-tenth, the present cost; that domestic lighting and heating could be supplied at a mere fraction of the ordinary present expenditure; that a saving of fuel would prolong the life of the coal fields almost indefinitely; and that the number of employees would be greatly reduced, as practically only the services of skilled mechanics would be required.

An English colliery owner has agreed, according to the newspapers, that Sir William Ramsay should make the experiments on a small scale at his mines, which will be done this summer. Should it prove successful, "a candle," Sir William Ramsay said, "will be lighted in England which will not be extinguished in our time."

Plans for the Experiment.

The method of carrying out the experiment is to put down a bore hole about $1\frac{1}{2}$ feet wide in a practically worthless stratum of coal. A tube would be inserted to keep the hole free from water. There would be three concentric tubes—the inside, middle, and outside. Air being forced down the outside tube, the coal would burn and gas would be brought up in the middle tube, or space between the middle and inside tubes. With a blazing fire below, the coal would slowly spread and distill and producer gases would be brought up. A high-tension electric current produced by means of the gases could be generally distributed.

A seam of coal must now be $2\frac{1}{2}$ or 3 feet deep before it can be successfully worked, but under the new plan it need not be more than a foot thick, and could be half shale.

Timely Subjects Presented.

Among the various phases of the subject of smoke pollution and abatement the following were dealt with by speakers at the conference and lectures held during the exhibition:

1. *Smoke pollution; its economic and artistic effect.*

(a) "The action of coal smoke on building stones and mural paintings," in regard to which it was calculated several years ago by a scientist that the sulphur present in the coal annually burnt in London gave off oxidized sulphur compounds corresponding to half a million tons of sulphuric acid. St. Paul's Cathedral furnished a striking example of the destruction so wrought. There was a blackish stalactite incrustation hanging to the underside of the cornice above the colonnade and below the dome; this was some inches deep in places, and contained nearly 74 per cent of gypsums or hydrous calcium sulphate.

(b) "The influence of smoke on decorations," in which it was pointed out that a coating of soot and dirt on paint work acted as a sponge, keeping the surface bathed in what was really a dilute solution of sulphuric acid; paint being permeable to moisture, this acid penetrated the film and attacked the material behind.

(c) "Effects of town air on metal work," in which various means of protection were mentioned, such as the application of lacquer, the principle of guarding by a more electropositive metal, and plating with nickel. But the real cure remained in the abolition of coal and coke and substituting gas.

2. *Effects on animal and plant life.*

(d) "Sunshine records." The superintendent of the forecast division of the Meteorological Office pointed out that the average loss of bright sunshine in London on account of smoke amounted to 38 per cent for the city proper and 36 per cent for Westminster. There was, however, a steady improvement, the winter sunshine in London having nearly doubled during the past 30 years.

(e) "The smoke nuisance at Kew Gardens," wherein it was remarked that since action had been taken with regard to certain neighboring factories much improvement had manifested itself, the worst offenders now being the steam tugs. Nothing is more disheartening to the cultivator than the deleterious influence of smoke; if that be removed, plants could be made to flourish at Kew and in the larger London parks as in country places.

(f) "Effects of smoke pollution on vegetation," in which the result of observations in and near Leeds showed that the smoke cloud shut off 40 per cent of sunshine, and this deprivation was rendered worse by the thick deposit of soot upon the leaves of plant life, blocking out their vital energy; the film of dirt, oily in character, choked the breathing pores of plants, tending to suffocate them. Firs and pines especially suffered, some planted in Leeds being killed in three months.

3. *Smoke abatement.*

(g) "The smoke problem in the United States," contributed by an American, wherein the different kinds of fuel obtaining on the American railroads were described, together with the steps taken to cope with the smoke nuisance, and how, in a certain State, the original law had, by constant amendment, become practically nullified until, in 1907, a vigorous crusade was entered upon, with the result that the smoke annoyance has now been greatly reduced. The author expressed the opinion that oil fuel is not used economically, but is as largely wasted as coal. When science has attacked and solved the problem, oil would be the fuel of the future.

(h) "Recent progress in the campaign against black smoke" (in Great Britain), in which were detailed the different exhibitions which have been held, commencing with that in London in 1905, and followed by those at Sheffield (1909), Glasgow (1910), and Manchester (1911), the greatest educational success having been attained in Glasgow, where the exhibition remained open for three weeks and attracted an average daily attendance of 4,000. With regard to the Coal Smoke Abatement Society in London, it was pointed out that during 1910 the number of cases of smoke pollution observed by the society's inspector and considered by the committee amounted to 1,094. The general course when an obvious nuisance was observed was to place a complaint with the borough council or other local authority concerned. Where, however, it was reasonable to believe that the smoke pollution detected was either accidental or due to a temporary breakdown, a friendly letter was sent drawing attention to the matter, and action of this kind, it was reported, was appreciated by manufacturers. With an income of only \$973 per annum, much had been accomplished by the society, and in addition to showing that smoke abatement is possible, it has been proved to manufacturers that in most instances striking economy can be effected by using the means of modern research for securing the maximum advantage from bituminous coal, while, by using smokeless methods of heating and cooking, the householder can aid in cleansing the atmosphere. The greater use of gas and electricity in place of coal was strongly advocated.

(i) "Smoke abatement from the inspector's point of view." The author was the chief smoke inspector at Sheffield, who pointed out that in 1890 the boilers and furnaces of the city were belching forth day and night black smoke. Action was taken and the smoke-abatement law which had been on the statute books for 15 years was enforced. There was resentment at first, particularly among stokers, who believed that the more smoke the more steam. They were, however, instructed as to the proper way of firing the furnaces so as to prevent the formation of smoke, with the result that a greater quantity of steam was generated, less coal consumed, and dense smoke eliminated.

The regulations as to the issuance of black smoke are as follows: One boiler, 2 minutes per working hour; 2 boilers, 3 minutes; 3 boilers, 4 minutes; 4 boilers and more, 6 minutes. If the regulations are twice violated, police court proceedings can be instituted and fines imposed. Sheffield in 1907 had 1,428 hours of sunshine (more than any other large city or town in the United Kingdom), being 273 hours in excess of the average for the large cities of the United Kingdom. This transformation is

claimed to have been due to the adoption of a common-sense and scientific method of feeding furnace fires. The creation of a Government "smoke department" was urged.

(j) "Wasteful power production; waste due to smoke," in which it was stated that, owing to the conditions of combustion in the ordinary domestic grates, domestic smoke contained about 25 per cent of tarry matter, and there was a probable loss in soot of 5 to 7 per cent of the total weight of fuel burned. In factory smoke it would average 0.25 to 1 per cent. The quantity of coal consumed in the United Kingdom in 1909 was approximately 177,000,000 tons, and if an average loss in soot be taken at 2 per cent, over 3,500,000 tons of fuel were wasted. It was further pointed out that with boilers and heat conductors coated with soot the rate of heat transfer was reduced, amounting to as much as 15 per cent for a layer of soot only one-twentieth inch thick.

(k) "Proposed legislation." At present there is no universal prohibition against all manufacturing smoke, and certain classes are exempt from legislation under existing acts. It is proposed to permit exemptions from an absolute rule in regard to particular chimneys for a limited period, to be renewable for 2 years, but not exceeding 10 years in all, when it is believed it will be more apparent what the next step should be. Pressure should be brought upon accidental emissions or through breakdowns. Penalties should be heavier and increase twofold on each successive conviction. Well-trained, scientific men, having technical knowledge of the furnaces they inspect, should be appointed as inspectors. A smoke department should be created in the local government board, but no interference with local bodies, which are now doing good work, should be allowed, and where certain cities possess their own acts, the provisions thereof would be made an addition to, and not a repeal of, regulations now existing.

How Technical Men Can Help.

At this exhibition, the gas engineer demonstrated that the architect could aid in the endeavor to ally utility with artistic surroundings. A large number of gas heating stoves were on view in the center of the hall, which attracted the attention of visitors by the neat-looking fireplaces and artistic style in which they were arranged. The arguments used in favor of gas were that the conversion of coal into gas, plus coke, tar, sulphate of ammonia, and many other valuable by-products, is a considerably more economical and hygienic method of using coal than by burning it in grates and kitchen ranges which pour out a large proportion of the by-products into the atmosphere, to its detriment.

Electrical engineers occupied the whole of one of the inner halls, which was fitted up with examples of electric cooking and heating appliances, including a restaurant where everything was cooked by electricity, and a model laundry was also entirely worked by electricity.

The Average Soot Fall.

According to *The Lancet*, "The estimated fall of soot on the administrative county of London amounts to 76,050 tons per annum, this including 6,000 tons of ammonia, 8,000 tons of sulphates, and 3,000 tons of chlorine combined as chlorides." This is equal to a soot fall on each inhabitant of 25 to 35 pounds per annum. To illustrate what this mass really meant, a group of models was exhibited at the exhibition consisting of a center model of Cleopatra's needle (17 feet high), representing the volume of soot, and another of the Parliament clock tower, to show the space occupied by the comparative structures—both of which were prepared to scale—and it is almost needless to add that the former far exceeded the latter.

Wide Range of Exhibits.

Among some of the principal exhibits the following may be mentioned: A patent furnace, applicable for steam boilers, locomotives,

steel reheating furnaces, brewers' coppers, etc., which, it is said, can be instantly regulated to burn slack, smudge, refuse, ashes, sawdust, coke, and the smallest coal. By a patent bar bridge the smoke nuisance is said to be effectively dealt with. Some of the advantages claimed were: The evaporation of more water per pound of coal than any other furnace; the upkeep is practically nil, the fire bars being indestructible; clinker does not stick on the grate bars; freedom from smoke nuisance; high chimneys are not necessary; and increased power can be instantly obtained and the fires of a banked boiler more readily put into operation.

A manufactured powder displayed, when dissolved in water and sprayed on coal, utilizes the waste products—smoke, soot, and gases—by burning them, causing the coal to last longer, burn brighter, and with intensified heat. A 1-pound tin (cost 36 cents) is sufficient for 1 ton of coal, and is said to save 30 per cent on the coal supply.

Numerous patent fuels were exhibited, and at one stand solid petroleum briquets were shown, manufactured from coal and crude hydrocarbons by the use of which smoke is abolished and economy is practiced; it was also stated that the briquets act as a disinfectant, while the calorific value is given as 14,500 British thermal units—equivalent to pure carbon. Another was also exhibited and stated to be cleaner than coal and smokeless. In order to radiate equal quantities of heat with coal and this fuel, $2\frac{1}{2}$ pounds of the former is required, as compared with 1 pound of this tarless fuel. A further patent fuel was shown which it was claimed would burn up the smoke, last twice the time of ordinary coal, and could be used with success in anthracite stoves, suction gas plants, and open grates. Anthracite coal also, in various screened sizes, from the Swansea Valley coal fields, was exhibited, together with anthracite stoves of different types.

Gas Stoves and Ranges.

The different gas companies in and around London combined to make an effective exhibit, with the view of proving the uses and value of gas for heating and cooking as well as for lighting purposes. Many of the leading manufacturers displayed the latest types of ranges, cookers, and heaters.

A stove was exhibited which can be used either as an open slow-combustion sitting-room grate, or can be immediately converted into a range and oven, capable of cooking for 8 to 10 persons, while the high-pressure water boiler can be heated whether the oven or the open fire is in use. It was stated that these stoves have been quite generally adopted in several "garden cities."

Legal Restrictions in Europe and America.

At the instance of the Coal Smoke Abatement Society the British Foreign Office in 1905 issued a series of reports in which were set forth the laws in various countries in reference to the emission of smoke. It was shown that Great Britain in the matter of legislation was far in advance of most of the other countries. No general law has been adopted in France. There is an "ordonnance" in Paris which forbids the prolonged emission of thick black smoke, but little effort has been made to enforce this municipal regulation. It is provided in Germany that care should be taken in all works under State control that the emission of black, thick, and continuous smoke

be avoided. It will be thus seen that there is no general law on this subject, but some of the German cities have taken the initiative on their own behalf. For example, in all manufacturing and industrial premises in Dresden the furnaces must be so constructed and stoking so regulated that no smoke containing visible particles of soot shall be constantly emitted. This ordinance or regulation was adopted in 1887 and later its provisions were extended to residences by an enactment that "in private dwelling houses the heating arrangements must be so contained as to produce as little smoke as possible."

Apart from the civic or State regulations in Philadelphia, Chicago, Massachusetts, and Ohio, which need not be detailed, mention may be made of the by-law passed by Toronto in 1907, which enacts that—

No owner, lessee, tenant, agent, manager, or occupant of any premises or steam engine in which a fire is burned, and no person who operates, uses, or causes or permits to be used any furnace or fire within the limits of the city of Toronto, shall permit the emission to the atmosphere from such fire of opaque or dense smoke for a period of more than six minutes in any one hour * * * any person convicted of a breach * * * shall forfeit and pay * * * a penalty not exceeding \$50 for each offense, and in default of payment * * * and costs forthwith * * * may be levied by distress and sale of the goods and chattels of the offender, and in case of there being no distress found out of which such penalty can be levied, the offender may be committed to the common jail, * * * with or without hard labor, for a period not exceeding six calendar months.

Proposed British Investigation and Law.

The Coal Smoke Abatement Society is urging the appointment of a royal commission to inquire generally into the subject of smoke emission for the purpose, if possible, of having a stringent general law passed by Parliament. Almost 70 years have passed since there has been any general inquiry into the matter in Great Britain, and it is believed, in view of all that has been accomplished in the meantime, that such a commission would render invaluable aid through its suggestions and conclusions to the cause of smoke abatement. In a paper read before the Coal Smoke Abatement Society, it was suggested that the royal commission, if appointed, should be directed to inquire:

(1) What standard, if any, is desirable as to the color or density of the smoke which should be deemed a nuisance.

(2) How the color or density of smoke can best be identified. (At present a variety of methods are employed, none of which is altogether satisfactory, and some uniform rule is urgently required.)

(3) Are the fines at present inflicted upon offenders sufficiently adequate to act as deterrents?

(4) Who should be punished, the owner of the works, the engineer in charge, or the stoker, when smoke nuisances result from careless manipulation of well-equipped installations?

(5) Should any industries receive special treatment?

(6) Should Government inspectors be appointed to act in regard to the emission of smoke as is done in the case of the alkali acts?

(7) Should Government premises be placed under the obligation to prevent smoke nuisances? (At present they are immune from prosecution.)

(8) Ought any hourly or other time limit to be fixed during which the emission of black or other smoke may fairly be permitted to issue from factory shafts? (At the present time limits fixed by various municipalities vary between 3 minutes and 15 minutes in the hour.)

(9) Should all cases be heard by stipendiaries (paid magistrates)?

(10) Can the issue of an unreasonable quantity of smoke be prevented except in the case of breakdown or accident?

(11) Can it be shown that the installation of proper appliances generally results in economy, as is contended by "smoke abaters."

- (12) The incidence, intensity, and duration of fogs and their effect on health.
- (13) The influence of smoke on health.
- (14) The damage of smoke to buildings, works of art, and property generally.
- (15) Foreign efforts to cope with the smoke nuisance.
- (16) How far it is possible by smoke abatement to conserve our coal supplies.
- (17) How far it is practicable to deal with smoke from private dwelling houses.

A copy of the official catalogue of the International Smoke Abatement Exhibition, a pamphlet on "Smoke Abatement," and copies of various descriptive pamphlets relating to many of the exhibits, etc., have been forwarded [and will be loaned to those making application to the Bureau of Manufactures at Washington].

NOTES FROM SIAM.

[From Vice Consul General Carl C. Hansen, Bangkok.]

Land Banks—River Survey—Waterworks Tenders.

A representative of a Belgian syndicate of capitalists recently visited Siam with the object of establishing land banks. It is proposed to lend money in reasonable amounts to cultivators of land at the rate of 9 per cent. The Siamese are said to regard this plan favorably.

The Hydrographic Department of the Siamese Navy has begun a survey of the mouth of the River Menam Chow Phya, which is the most important river in Siam and on which Bangkok, the capital of the Kingdom, is located, about 20 miles from its mouth.

Tenders for the construction of ferroconcrete settling tanks and filtered-water reservoirs were invited on March 22, 1912, but the time limit was so short that only local firms were able to bid.

Successful American Bidder.

Tenders for the supply and erection in Bangkok of an electric power station of 3,000 kilowatts were opened on March 15, 1912. Fourteen bids were received, and the combined tenders of the Allgemeines Electricitäts Gesellschaft (Germany), British Thomson-Houston Co. (England), and General Electric Co. (United States), have been accepted. These amount to \$229,212.

The Allgemeines Electricitäts Gesellschaft will install the turbo-generators with condensers. There will be three of these, with a total capacity of 3,000 kilowatts, 3-phase, 50 cycles, 3,500 volts. This is the same system as that employed by the Siam Electricity Co. (Ltd.). The turbines are to be of the Curtis horizontal type, direct connected to the generators, and running at 3,000 revolutions per minute. The British Thomson-Houston Co. will supply the switch gear and the General Electric Co. the transformers. Eight Babcock & Wilcox boilers, each with a heating surface of 4,000 square feet, and able to burn husk, oil, or coal, will be used. The station must be ready within 18 months from the date of signing the contract.

GERMAN INDUSTRIAL INVESTMENTS.

[From the Frankfurter Zeitung.]

The amount of fresh capital invested in industrial enterprises in Germany during the first quarter of 1912 was \$102,500,000, as compared with \$77,250,000 in the corresponding period of 1911. The following approximate amounts were invested in the more important branches: Banks, \$33,000,000; engineering, \$15,000,000; electrical and gas, \$10,300,000; mining, foundries, etc., \$9,000,000; chemical industries, \$4,500,000; building trades, \$4,000,000; textiles, \$2,750,000.

ANNUAL AUTOMOBILE EXHIBITION IN BOHEMIA.

[From Consul Joseph I. Brittain, Prague, Austria.]

The ninth annual Automobile and Motor Cycle Exhibition of the Bohemian Automobile Club of Prague was held in the exhibition buildings, April 7 to 15, 1912. The leading officials were present at the opening exercises, including the vice governor of Bohemia.

The number of cars exhibited has been yearly increasing, until this time there was little unoccupied space. Among the leading exhibits were the following cars: The Benz, of various types, including a large heavy dray wagon; machines manufactured by the Českomoravská Továrna na stroje (Bohemian Moravian Machine Works of Prague), which cars are considered as belonging to the better type manufactured in Bohemia; the Laurin & Klement, of Jungbunzlau, Bohemia; the Raf, of Reichenberg; and the Puch, of Gratz. Other cars were the De Dion-Bouton, Mercedes, Stower, Scat, Austro-Daimler, and the Minerva. The agent for the Ford cars reserved a space in the exhibition building, but his cars did not arrive in time for display. The Studebaker Co., through its agent at Aussig, Bohemia, occupied a prominent place with three cars of the medium grade.

Preferences in Finish and Style.

Thus far the American manufacturer of high-grade cars, such as would sell for \$4,000 to \$5,000, have failed to take sufficient interest in this market, where the Italian, French, Belgian, and German builders are selling some fine cars. The manufacturers of European cars, and especially those made here, devote much time and care in constructing bodies along graceful lines, avoiding as far as possible sharp or square corners. Especial care is also taken in rubbing down and filling the woodwork before painting. The impression prevails here that American cars are more cheaply finished, but finer ones are not exhibited. Whenever manufacturers of American cars take as much interest in this growing market as do manufacturers of other foreign cars, their sales will increase, but people will not purchase cars from photographers.

Large Sales of American Tool Machinery.

For the first time there was exhibited a fine line of American tool machinery, representing the leading builders of such machinery in various parts of the United States. There were two large displays under the direction of experienced machinists. The displays were both supplied by power, thus enabling the various machines to be shown in operation. The two exhibits, one made by Schuchardt & Schütte, and the other by Ernst Krause & Co., of Prague, represented a value of about \$50,000. These exhibits occupied ample space in prominent positions, and attracted much attention. I was informed that the annual sale of American tool machinery in Bohemia will exceed \$2,000,000.

During the second week in April, 1913, there will be an automobile exhibition on a more extensive scale.

Consul Hunter Sharp reports the launching at Belfast on April 24 of the 6,700-ton *Laomedon* for the China Mutual Steam Navigation Co. It is constructed on a special girder system which provides unobstructed cargo space in the holds.

WHOLESALE PRICES IN CANADA.

[From Consular Agent Sydney F. Culver, Fredericton, New Brunswick.]

Wholesale prices in Canada reached during 1911 a general level higher than in any previous year within the present generation. The statistical record of the Department of Labor shows that since 1890 prices have only once approached a high point comparable with those of last year, namely, 1907.

The year was one of general trade prosperity and industrial expansion in Canada. The heavy immigration movement, the very pronounced activity in railroad construction and other building operations, the enlarged outputs of manufacturing establishments, and the increased volume of trade, foreign and domestic—in which field the returns of the year uniformly indicated a very marked advance over those of 1910—all united in causing an exceptionally keen demand for materials, hence the increase in prices.

In foodstuffs the unfavorable crop returns of the summer and autumn months worked similar tendencies. Grain advanced sharply, and the decline in live animals and meats was attributed to feed shortage. Imported foods, including sugar, were on decidedly higher levels. The financial tone was good, and the production of gold was the highest recorded.

The Rise and Decline of Various Commodities.

The general level of prices in the several groups in 1911, expressed in percentages of the increase or decrease when compared with 1910, is shown in the following table as given in the report of wholesale prices by the Department of Labor:

Groups.	Increase or decrease.	Groups.	Increase or decrease.
	<i>Per cent.</i>		<i>Per cent.</i>
Grains and fodder.....	+ 5.8	Hides, leather, boots and shoes:	
Animals and meats.....	-10.2	Hides and tallow.....	+ 6.0
Dairy products.....	- .9	Leather.....	+ .2
Fish.....	+ 1.5	Boots and shoes.....	- .4
Other foods.....	+11.8	Fuel and lighting.....	- .8
Textiles:		Building materials.....	+ 3.0
Woolens.....	+ 4.9	Miscellaneous:	
Cottons.....	+ .5	Furs.....	+ 7.4
Silks.....	- 1.6	Liquors and tobaccos.....	+13.8
Flax products.....	+ 7.2		
Jutes.....	+33.6	All commodities.....	+ 2.7

The 1911 apple crop sold at considerably lower prices up to the close of the year than prevailed during the corresponding period of 1910. A common price to the grower in carload lots was \$2 a barrel for winter apples. Small growers, however, received as low as \$1.50 per barrel, whereas some of the Ontario cooperative associations obtained \$2.75 to \$3 for good stock. Peaches were a good heavy crop and showed a material advance over 1910. Pears were a short yield, and the prices were higher than in the preceding year.

Vegetables, Flour, and Lumber.

The feature of the movement in vegetables was the high price of potatoes, which sold at \$1.24 a bushel, compared with 58.3 cents in 1910. Crop failure in Ontario was the leading cause. Canadian red onions also rose from \$1.29 in 1910 to \$2.06 in 1911. With canned

vegetables the autumn prices in 1911 were considerably higher than in 1910. Canned corn, standard 2's, which averaged 86 cents in 1910, was \$1 last year. Peas, standard 2's, were \$1.09 in 1910 and \$1.33 in 1911.

Taking the year as a whole flour prices were lower than in 1910. Oatmeal, after a drop in the spring months, recovered in June and rose rapidly in the autumn, prices being 5 per cent higher than in 1910. Coffee advanced rapidly in November and December, the increase being attributed to delay in the crop movement and market manipulation.

The record of the Department of Labor indicates a somewhat higher general level of prices in lumber for 1911 as a whole than for 1910. The advance of the yearly average was largely due to the continued rise in the high grades of pine; laths were also upward, as was soft maple in Toronto. The lower grades of pine and maple were cheaper than in 1910. The average price at which the entire cuts of several mills in the Ottawa Valley were sold was estimated to be slightly below that of the preceding year—\$20 per thousand as compared with \$20.50 in 1910. New Brunswick spruce deals were lower, but shingles from this Province were higher. The same situation developed in the West.

A CANADIAN HYDROGRAPHIC EXPERIMENT.

[From Consul Henry S. Culver, St. John, New Brunswick.]

The St. John River, which empties into the Bay of Fundy at this city, forms in its upper reaches the boundary between Maine and New Brunswick. For many years there has been more or less acute trouble each spring between the lumbermen on the two sides of the river about the difficulty of separating the logs belonging to the various owners. Attempts have been made, more or less successfully, to hold up the logs until they are sorted, but of recent years, according to the usual practice of rivers running through deforested regions on this continent, the spring freshet water of the St. John has been allowed to flow out very quickly, so that by the time the work of sorting is completed the logs are stranded for lack of water to float them.

An attempt is to be made to get over this difficulty by building dams and reservoirs for regulating the flow of the river and prolonging its capacity to float logs down to any desired point. The whole matter has been under investigation by a mixed commission made up of two representatives of Maine and New Brunswick, with the aid of scientific experts. The plan involves 20 dams at a cost of about \$1,000,000. However, there is always a danger of one of the series of dams breaking away and allowing a fierce flood to bring an enormous pressure to bear on the dams lower down. It may yet be found necessary to hold back at least part of the freshet water in the tributaries of the river so as to lessen the risk of delay through collapses of dams in the main stream.

Consul Albert Halstead reports that the total value of declared exports to the United States from the Birmingham, England, consular district for the first quarter of 1912 was \$957,577, a loss of \$73,329 as compared with the similar quarter of 1911.

BRITISH INDUSTRIAL NOTES.

[From Consul Benjamin F. Chase, Leeds.]

Extension to Gas Plant—Largest Canal Boat.

The Doncaster Corporation has applied to the Local Government Board for power to borrow \$160,594 for extensions to the gas works.

The largest canal boat ever built in Leeds was launched recently by its owners, a firm of coal merchants. The boat, constructed of English oak, is 62 feet long, with a 14 foot 8 inch beam, draws 5 feet 6 inches of water, and has a carrying capacity of 100 tons of coal.

New University Building—Coast Lookout Stations.

An additional building for the textile department of Leeds University, erected from a gift of \$24,332 by the Clothworkers Co., will be formally opened April 26. The Clothworkers Co. has donated to this branch of the university a total of \$364,987 for buildings and equipment.

The Board of Trade is making preparations for more lookout stations on the Yorkshire coast to warn ships of derelicts, etc. The plan is to erect watch sheds or shelter huts in exposed places on promontories, to be occupied in bad weather by coast-guard watchmen. They are to be connected with the nearest coast-guard stations by telephone.

Dead-Letter Reorganization—Fisheries.

Leeds is the dead-letter office for an area including 37 towns and the greater part of Yorkshire. A staff of eight attend to this work. A new plan is being formulated to have a dead-letter department in each independent head office. This will insure quicker delivery and will reduce the work in Leeds to about one-third its present rate.

Local newspapers give extracts of a report made to the North-eastern Sea Fisheries Co., which controls the fishing on the North Sea along the shores of Durham and Yorkshire from Sunderland to Grimsby. The report shows the value of fish landed in 1891 to have been \$8,723,021, and in 1911, \$18,203,698. The weight of wet fish landed was: 1891, 2,088,551 hundredweight; 1911, 5,904,865 hundredweight. Of these, 169,784 hundredweight in 1891 and 189,844 hundredweight in 1911 were from towns in the Leeds consular district extending from Redcar to Filey. There are now 17 steam trawlers, all short-voyage vessels, working regularly from Scarborough, the chief fishing port in this district.

Clubs and Homes for Working Girls.

The Leeds Association of Girls' Clubs has a membership of 1,200, all connected with either a church or a chapel. Payment of 2 cents a week gives the rights of the clubs to girls, with free instruction in dressmaking, laundry work, knitting, cookery, needlework, swimming, drilling, etc. An annual exhibition is held, when prizes are competed for by the various branches.

A new home for working girls was recently opened by the Leeds branch of the Girls' Friendly Society. A house formerly used as a vicarage has been redecorated and refitted. It will accommodate 25 boarders and about five times as many day girls. There is a large open space and garden at the rear. The interior includes a lounge or rest room for reading, writing, and study; a recreation room for games, classes, meetings, etc.; an office, which will also serve as an employ-

ment registry bureau; and several bedrooms. A restaurant with a separate entrance will furnish meals to girls at very low prices. This is the first lodge to be opened in Leeds. The first in England was established in 1875, and now there are between 60 and 70 in England and Wales. That at Birmingham has 80 boarders and served 33,000 dinners last year.

HAWAIIAN BUSINESS NOTES.

[From the Honolulu Bulletin.]

The Commercial Museum of Japan at Honolulu was opened to the public early in April.

New vessel.—A million-dollar steamship for the Puget Sound-San Francisco service is now planned.

Hospital.—A home for consumptives may soon be established in Hilo. Dr. Sexton, president of the board of health Pratt, and secretary of the Territory Mott-Smith are planning the proposition.

Hawaiian Coffee for the Army.

Honolulu merchants have been given an opportunity to bid on furnishing 30,000 pounds of coffee per month for the Army in the Philippines, which is in addition to the purchase in this market of about 5,000 pounds of Kona coffee per month for the local Army forces.

[Statement of Brig. Gen. Henry G. Sharpe, Commissary General of War Department, Washington.]

An order has been placed for one shipment of 35,000 pounds of coffee to the Philippines from Honolulu, and the Chief Commissary, Philippines Division, has been asked to report on the condition and quality of the coffee with a view to determining whether further shipments shall be made from Honolulu. The price quoted the Department, 24½ cents per pound, is 1 cent cheaper than the lowest quotation in San Francisco for coffee of this type.

NEW GOVERNMENT PUBLICATIONS.

The following recent publications of the Department of Agriculture may be had at the prices affixed from the Superintendent of Documents, Government Printing Office, Washington, D. C.:

Technical drug studies by Division of Drugs; Examination of hydrogen dioxid solutions; Purity of glycerin; Notes on two important alkaloidal reactions; Separation and identification of small quantities of cocaine; Determination of molybdic trioxid; A method for testing ammonium salts; Character of samples of beeswax submitted with bids. Pp. 51. (Bulletin 150, Bureau of Chemistry.) Price, 10 cents.

Chemical analysis and composition of imported honey from Cuba, Mexico, and Haiti. Pp. 21. (Bulletin 154, Bureau of Chemistry.) Price, 5 cents.

Wood-using industries and national forests of Arkansas: Part 1.—Uses and supply of wood in Arkansas; Part 2.—Timber resources of national forests in Arkansas. Pp. 40. (Bulletin 106, Forest Service.) Price, 5 cents.

Highway bridges and culverts. Pp. 21, pls. 14, figs. 3. (Bulletin 43, Office of Public Roads.) Price, 15 cents.

Pasteurization of milk. Pp. 44, figs. 32. (Circular 184, Bureau of Animal Industry.)

Rules and regulations for enforcement of the food and drugs act. Pp. 20. (Circular 21, revised, Office of the Secretary.) Price, 5 cents.

Adulteration and misbranding of red clover, Kentucky bluegrass, orchard grass, and hairy vetch seeds. Pp. 7. (Circular 39, Office of Secretary.) Price, 5 cents.

A *Linoleum Merchants' Association* has been formed in Germany, headquarters Leipzig, to further the trade and assist linoleum merchants in their negotiations with linoleum factories. The Linoleum Merchants' Union, of Berlin, Dresden, Frankfort, Cologne, Leipzig, and Munich, immediately joined the new association.

INCREASING STREET ACCIDENTS IN UNITED KINGDOM.

[From Consul General John L. Griffiths, London.]

The statistics of street accidents in the United Kingdom during the calendar year 1911 show how rapidly mechanically driven vehicles are being introduced into the country. The accidents in 1911, fatal and nonfatal, aggregated 35,210, as compared with 31,077 in 1910. There were 1,557 fatal street accidents last year, of which 684 were caused by horse-drawn vehicles and 873 by those which were mechanically propelled. The number of fatal accidents in 1910 was 1,327. Horse-drawn vehicles were responsible for 655 of such accidents and mechanically driven vehicles for 672.

A far greater number of accidents, not resulting in death, were due to mechanically propelled vehicles than to horse-drawn vehicles. Of a total of 33,653 nonfatal accidents, 13,427 were due to horse-drawn vehicles and 20,226 to mechanically driven vehicles. In 1910 the respective figures were 13,622 and 16,128, which show that there were fewer nonfatal accidents in 1911 caused by horse-drawn vehicles than in 1910, but a very large increase in those caused by mechanically driven vehicles.

JAMAICA-CANADA LINE.

[From Consul Julius D. Dreher, Port Antonio.]

A resolution by the Legislative Council approves negotiations by the Government of Jamaica for a weekly steamer service between Jamaica and Canada, in conjunction with an island coastal service, for 10 years at a subsidy of \$100,000 per annum.

So far as can be determined from Kingston papers, it appears that the proposed line is to run in connection with the Canadian Pacific Railway and that during the winter months the ships would touch at Boston. The ships are to be of some 7,000 tons each, with accommodations to carry about 70,000 bunches of bananas on each trip to Canada.

AMERICAN ROAD MACHINERY FOR HONDURAS.

[From Consul A. T. Haeberle, Tegucigalpa.]

After considering the question of purchasing road-making machinery for some time, the Government of Honduras recently placed in the United States an order for a complete outfit—engines, rock crusher, and cars. Work will probably be begun as soon as the machinery arrives. The present administration has been repairing the cart road from San Lorenzo to the capital and hopes to build a new road to Olancho and also repair the old road to Comayagua, the greater part of which is abandoned at the present time.

Agricultural Science in High Schools.

The new Government bulletin on "Agricultural Education in Secondary Schools," will be sent free upon request to the Commissioner of Education, Department of the Interior, Washington, D. C. Among the topics covered in the Bulletin are the following: Essentials in a State system of agricultural education; the need for reliable scientific data regarding the rural problem; and the proper equipment of an agricultural high school.

NOTES FROM RUSSIA.

[From Consul John H. Grout, Odessa.]

Russian Beans and Peas.

Of late there has been an increasing demand from the United States for Russian beans and dried peas. Large shipments have already been invoiced through the Odessa consulate, the rapidity of the growth of this trade being clearly shown by the declared export totals of the last two years, which were: 1910—beans \$928, peas nil; 1911—beans \$4,337, peas \$112,025.

This trade, however, has not been devoid of unsatisfactory results. Complaints have come from the United States to the effect that the goods received have not been up to sample and in some instances have been unsalable. Much of this trouble has been due to the fact that proper contracts have not been drawn up to protect the interests of those concerned. There are reliable dealers here and also unreliable ones. Several cases referred to this consulate for investigation have had to be turned over to local attorneys for adjustment. This means long delays and expense for American buyers, not to speak of annoyance and inconvenience.

As a rule, the Russian seller demands that a confirmed letter of credit be placed with a local bank against which he can draw immediately upon shipment and the production at the bank of a certified consular invoice. If the seller ships goods according to sample, all goes well; but should he send inferior goods, he gets his money just the same and the American buyer has to suffer. Happily, dissatisfaction is not always the case, but it is suggested that prospective purchasers protect themselves by placing with proper authorities sealed samples against which they buy, for possible future comparison. In Odessa the Russian buyer deposits his sealed samples with the local bourse. Here records are made, and should the goods arriving be inferior to the samples bought against, the matter is referred to an arbitration board. A form of contract considered very useful by certain reliable Odessa firms and which can be adapted to many articles of trade, is transmitted herewith [and will be loaned by the Bureau of Manufactures].

[From Consul General John H. Snodgrass, Moscow.]

Cold Storage.

At its yearly meeting the refrigerator committee of the Moscow Agricultural Society discussed the question of opening a refrigerator museum in this city in the near future, and also the subject of participation in the sheep-breeding exhibition to be held in Moscow this fall, by organizing a section illustrative of the refrigerating business. Improved methods of transporting meat, butter, and fish from Siberia were considered in connection with the project of the chief management of railways to regulate the shipment of such foodstuffs by the erection of modern refrigerators at certain points along the line of the railway.

Bank dividends.—The recent 17 per cent dividend, free of tax, of the British Bank of South America was noted in Daily Consular and Trade Reports for April 3. It is now stated that the London and Brazilian Bank is also paying 17 per cent, with a special bonus of 5 per cent in commemoration of the jubilee of the bank.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8791. Show-case counters.**—The Bureau of Manufactures is in receipt of a communication from a manufacturing concern in the United States advising that one of its correspondents in Porto Rico has requested to be placed in touch with some dealer in the United States handling show-case counters. Correspondence, in Spanish, should be direct with the inquirer.
- No. 8792. Machinery for soap and candle making.**—An American consul in a Latin American country reports that a concession has been granted to a resident of his district to establish a soap and candle factory, and catalogues are requested showing machinery and prices of same. A small plant is desired. Manufacturers should send catalogues, price lists, correspondence, etc., in Spanish, to this firm.
- No. 8793. Well-drilling machinery.**—A foreign business man informs an American consulate that he desires to be put in communication with manufacturers of machinery for drilling artesian wells, and would like to receive catalogues describing such machinery. Owing to the unusual scarcity of water in the section of the country in question, it is believed that a good market for this class of machinery can be developed. Names of other importers who might be interested in well-drilling machinery are given in the report also.
- No. 8794. Iron and steel products, machinery, and tools.**—One of the commercial agents of the Department of Commerce and Labor reports that a resident of a country in the Near East, who has the capital and facilities for doing a large business, desires to represent American manufacturers of iron and steel products of all kinds, machinery, and machine tools. He would also like to get in touch with manufacturers of steel rails, locomotives, and cars for railroads, with a view to securing Government contracts for these supplies.
- No. 8795. Screw drivers.**—A business man in a European country informs an American consular officer that he is desirous of obtaining the names of American manufacturers of screw drivers. He desires a tool which has a handle like a knife and which can be pushed in after releasing the catch.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 634. Coal.**—Sealed proposals for furnishing and delivering 3,600 tons, more or less, of bituminous coal will be received at the United States Engineer Office, 920 Seventeenth Street NW., Washington, D. C., until May 31, 1912. Information on application to W. C. Langfitt, Lieutenant Colonel, Engineers.
- No. 635. Steel traveling cranes.**—Sealed proposals for furnishing and erecting two steel traveling cranes will be received at the United States Engineer Office, Seattle, Wash., until May 31, 1912. Information on application to that office or to United States Engineer Office, Pittsburgh, Pa.
- No. 636. Panama Canal supplies.**—Sealed proposals, in triplicate, will be received at the office of the General Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., until May 20, 1912, for furnishing structural steel, rivets, galvanized conduit, electric cable, wire, fuses, sockets, plugs, dry cells, carbons, vulcanized red fiber, wire solder, and wire clamps. (Circular No. 707.)
- No. 637. Condemned ordnance stores.**—Sealed proposals, in duplicate, subject to the usual conditions, will be received at the Rock Island Arsenal, Rock Island, Ill., until May 24, 1912, for the purchase of condemned ordnance stores. Catalogues giving quantities, conditions, etc., can be had on application to the commanding officer, Rock Island Arsenal.
- No. 638. Sulphate of alumina.**—Sealed proposals for furnishing and delivering about 400 tons of sulphate of alumina will be received at the United States Engineer Office, 920 Seventeenth Street NW., Washington, D. C., until May 31, 1912. Information on application to W. C. Langfitt, Lieutenant Colonel, Engineers.

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ESSENTIAL OIL INDUSTRY OF THE RIVIERA.

[From Consul William Dulany Hunter, Nice, France, Mar. 14.]

The changes in the perfumery industry on the Riviera during the past few years, due to the formation of associations or syndicates, both of the flower growers and of the perfume manufacturers, have not modified to any great extent the conditions existing previous to their organization. A company with a capital of 14,000,000 francs (\$2,702,000) is being formed by the two principal manufacturers of this region, and it is supposed that this combine will greatly influence the future development of the perfume industry, as these two firms control about one-fourth of the total export of this commodity to the United States.

The associations formed among the growers to control the prices of the flowers have not had the success that was expected by their promoters. These syndicates can be divided into two categories, the first of which is an association formed for the possible monopoly of the sale of a certain flower grown by members of the syndicate. The second is an association of the flower growers of certain villages or districts with the aim of improving the general condition of the industry and of realizing the highest prices for their products, but without the intention of dictating the prices of the flowers.

Orange Flower Syndicate.

The largest association in the first-mentioned category is the Syndicat des Fleurs d'Orangers, founded several years ago and controlling about 65 per cent of the total orange-flower production. Its members are bound not to sell their output direct to the perfume manufacturers, but to deliver to a committee, elected by the members, which is authorized to sell the flowers at a minimum price agreed upon at a general meeting. In case the manufacturers are not willing to pay the price demanded, the committee distills and manufactures the essential oils and flower waters and sells them direct to the trade in competition with the perfume manufacturers.

In 1909, before the manufacturers had formed their association, they were obliged to accept the prices dictated by the orange-flower syndicate, but since then conditions have changed, for the following reasons: The chief product of the orange blossom is the essential oil called neroli. The average catalogue price of neroli for the past three years has been about 600 francs a kilo (\$52.52 per pound), and at this figure the manufacturers had a large margin for their profit as well as for the commission and other rebates offered by them to the trade. At the price dictated by the flower syndicate the margin of gain was too small, and the perfumers found a way of replacing neroli with mixtures of synthetic essential oils, which could be sold at lower prices. The orange-flower growers were, therefore, obliged to distill their own flowers.

The syndicates can not compete successfully with the perfume manufacturers, as the former handle the products of only one flower, while the latter can utilize the services of their employees and their machinery during the whole year for the manufacture of essences from various kinds of flowers. The flower syndicates have at present on hand a stock of neroli estimated at over 4,000 kilos (8,818 pounds) which they are offering to the manufacturers at a cash price of 400 francs per kilo (\$35.02 per pound) without finding buyers.

Nonmembers' Contracts—Jasmine and Perfumers' Syndicates.

In consequence the orange-flower growers who are members of the combine have not been able to realize the value of their productions and are worse off than those who have the right of free sale for their output. The growers who are not members of associations have signed contracts with the manufacturers for a number of years, the latter having agreed to buy their total crop at a stipulated price. This has the advantage of permitting the manufacturers to sell their products at fixed prices and to sign contracts with consumers for long periods, thus giving stability to prices and making it possible to so regulate the output as not to increase the stock on hand beyond the probable demand.

More successful than the orange-flower combine has been the syndicate of the jasmine growers, which has been able to find several large customers at Paris who are willing to buy at remunerative prices the association's entire present output of concrete of jasmine. The syndicate controls about one-tenth of the production of the jasmine flower and has not been able to obtain many new members, as the experience of the orange-flower association has increased the number of growers who prefer the direct-contract system. There is a union of rose and violet growers, but it controls too small an amount of the total crop of these flowers to be able to influence, to any extent, the existing market prices.

The manufacturers of perfumery have also formed an association called *Syndicat des Parfumeurs*. This was founded to counterbalance the syndicate of the flower growers, to form a union among the manufacturers for their mutual protection, and to eliminate competition between the different firms; but owing to the absence of unanimity among the manufacturers, due to old and personal rivalries between the different firms, it was impossible to realize the hopes entertained at its foundation. The *Syndicat des Parfumeurs* has for these reasons remained a purely debating society, and the resolutions voted are not even binding upon the members.

Geranium d'Afrique and Bois de Rose Femelle.

An important change has taken place in the prices of the essential oils Geranium d'Afrique (oil of rose geranium) and of Bois de Rose Femelle (linaloe oil). The large increase in the price of Geranium d'Afrique is due neither to the syndicate of flower growers nor to the manufacturers, but to other causes, the principal one of which is that about two years ago this essential oil was quoted at 22 francs per kilo (\$1.93 per pound) and even lower. At these prices it was not remunerative to grow the geranium for the manufacture of perfumery, and many of the large producers preferred to use the soil for more profitable culture. There being no unanimity among either cultivators or manufacturers to curtail production or to fix a minimum price, those manufacturers who tried to maintain prices lost heavily.

Another reason for the advanced price of Geranium d'Afrique was the small crop from Africa, and especially from Ile Bourbon [Reunion], and of large contracts for delivery of the oil during this and the beginning of next year. Buyers not having the necessary quantity of geranium on hand are obliged to cover their needs at figures far above those stipulated in their contracts. At present it is difficult to procure geranium at 40 francs per kilo (\$3.50 per pound); 45 to 50 francs per kilo (\$3.94 to \$4.38 per pound) are being asked, but there are no purchasers at these advanced rates.

The decline in price of essential oil of Bois de Rose Femelle (linaloe oil), which has fallen from about 35 francs to 22 francs per kilo (from \$3.06 to \$1.92 per pound), is caused principally by overproduction, but it is not likely that these low quotations will be long maintained.

Oil of Violets.

The crop of violets has been especially good this year, and they are offered by nonassociated growers at 3.5 and 4 francs per kilo (31 and 35 cents per pound). These are the lowest prices in years; still it is not likely that there will be any decided fall in the price of essential oil of violets, as the manufacturers are bound by contracts to the flower growers and are paying 5 francs, 5.5 francs, and even higher per kilo (44 and 48 cents per pound), and have agreed to sell to their customers on certain dates the essential oil to be produced this year. The value of the concrete of violets, about 1,800 francs a kilo (\$157.58 per pound), makes it impossible for any but very substantial firms to keep a large stock of essential oil of violets on hand, and the loss of interest would counterbalance in large part the present low price of violets.

[A review of the Sicilian essential-oil industry appeared in Daily Consular and Trade Reports on Apr. 9, 1912.]

AMERICAN STATISTICS FOR PERFUMERY AND COSMETICS.

In giving the general statistics for the establishments reported for the census of 1909 as engaged primarily in the manufacture of perfumery and cosmetics in the United States the Bureau of the Census states that of the total number (429) 195 are conducted by individual proprietors, 65 by firms, and 169 by corporations. Other data follow: Proprietors and firm members, 358; salaried employees, 1,484; wage earners (average number), 2,375; capital, \$6,788,364; salaries, \$1,647,657; wages, \$994,221; materials, \$5,634,031; miscellaneous expenses, \$3,365,701; value of products, \$14,211,969;

value added by manufacture (value of products less cost of materials), \$8,577,938.

American official records show imports into the United States of "perfumeries, cosmetics, and all other toilet preparations" valued at \$1,250,855, \$1,120,396, \$1,425,613, \$1,214,792, and \$1,534,537, respectively, for the last five fiscal years. By principal countries the imports during 1909, 1910, and 1911 were:

Countries.	1909	1910	1911
Austria-Hungary.....	\$2,836,121	\$5,283,856	\$3,790,214
Belgium.....	1,265,975	1,044,306	1,353,036
France.....	60,547	73,553	58,450
Germany.....	9,151	7,920	9,090
Italy.....	730	3,858	2,101
Russia in Europe.....	66,133	56,893	82,243
United Kingdom.....	1,576	2,038	832
Cuba.....	14,005	15,967	18,539
Japan.....	2,968	4,418	4,292
All other countries.....			
Total.....	1,425,613	1,214,792	1,534,537

The United States exported "perfumeries, cosmetics, and all other toilet preparations" to the value of \$604,822 in the fiscal year 1907, \$620,230 in 1908, \$683,253 in 1909, \$824,460 in 1910, and \$1,009,359 in 1911. Canada was the chief purchaser throughout this quinquennial period, taking \$203,648 worth in 1911. The Philippine Islands ranked second last year with \$40,896 worth, Panama third with \$37,410 worth, the other principal buyers being: Honduras, \$11,510; Nicaragua, \$11,398; Mexico, \$22,496; Jamaica, \$15,483; Cuba, \$31,624; Australia and Tasmania, \$31,774; Canary Islands, \$12,251; and Egypt, \$11,202.

NEW PERFUMES FOR SOAPS.

The manufacture of soaps demands perfumes of a very special tenacity and of absolute stability against alkaline agents. For this reason a considerable market has been opened for several substances belonging to the series of ether oxides, single or mixed.

One of the most interesting, says *La Parfumerie Moderne*, is unquestionably the artificial oil of geranium, which we may state at once has no connection as regards constitution with the real oil of geranium; its odor, especially in soap, however, recalls this with sufficient fidelity for it to have come into serious competition with the oils of Bourbon and of Africa. It is oxide of phenyl. The most desirable method of its manufacture is without question the industrial application of the general method of Gladstone and Tribe. The phenol is heated to a temperature near its boiling point and with the usual precautions aluminum is added in the quantity given in the equation: $3C_6H_5OH + Al = 3H + Al(C_6H_5O)_3$. Then the phenolate of aluminum thus obtained gives by dry distillation the oxide of phenyl according to the equation: $2Al(C_6H_5O)_3 = Al_2O_3 + 3C_6H_5 - O - C_6H_5$.

Other methods may be employed, such as heating the phenol with the sulphate of diazobenzene, or, again, heating the phenol to about 350° in the presence of chloride of aluminum, etc.

Oxide of phenyl melts at 28° C. and boils at 253° C. Melted it has a fluorescent appearance and, thanks to its ether oxide function, it is very stable. There can be obtained as product usable in soap making one-third the weight of the phenol utilized. This field, in connection with the low cost of materials used, makes a product of great aid in cheap soap making. It is mixed with oils of citronella, palmarosa, clove, and vetiver, even with other chemical perfumes, such as formiate of citronellyl and terpineol, so as to obtain a large series of odors all based on geranium. It is usually estimated that 100 grams of oxide of phenyl have, as regards intensity, a value equivalent to a kilo of the Bourbon oil without having, it must be admitted, the same delicacy, but altogether sufficient for the production of ordinary goods, or for disguising certain odors of rancidity originating in the fatty substances used.

DEVELOPMENT OF ARTIFICIAL-SILK INDUSTRY.

[From Consul William H. Hunt, St. Etienne, France.]

Notwithstanding the rapid increase in the number of French mills, the production of artificial silk remains far below that of real silk and wholly inadequate to the demand. In 1909 over 32,000,000 kilos (70,547,900 pounds) of real silk were turned out by the world's producing centers, but the spinning factories for artificial silk were unable to deliver more than 1,350,000 kilos (2,976,200 pounds).

The raw material used in the production of the latter is cotton. Its chemical nature does not change after manufacture, and, except for some additional process to render it brilliant or incombustible, it is still nothing but cotton. Therefore, the only difference between artificial silk and cotton fabrics lies in the weaving process—mechanical for cotton stuffs, chemical for artificial-silk stuffs.

Three processes are in general use, the Chardonnet, the viscose, and the one called vegetable casein (*caséine végétale*). Competition is based on cost. From that point of view the viscose process seems to be the most desirable, costing only \$1.35 to \$1.55 per 2.2046 pounds, but that is still considered rather dear.

Spun Glass.

Recently patents have been taken out for an artificial silk, the base of which differs from those now in use. It has the advantages that it is unflammable, unaffected by humidity, and indestructible by acids or by alcohol.

The new silk is at base spun glass—spun at one-eighteenth of a hair's diameter. This almost imperceptible filament, to which the addition of different chemical products gives brilliancy and suppleness, is stronger and more solid than any of the other artificial silks of commerce. It can be twisted, braided, or woven with extraordinary facility, and constitutes a real advance in that industry the product of which the Germans call "glanstoff" and the French "artificial silk."

This new product, said to be superior in all points to the others, has also the advantage that it costs only 25 to 30 cents per 2.2046 pounds to produce.

[Among numerous other articles on artificial silk that have appeared from time to time in Daily Consular and Trade Reports were those published on July 30, 1910, and Mar. 1 and 25 and July 17, 1911.]

JAVA'S TEA EXPORTS.

[From Consul B. S. Ralrden, Batavia.]

The Tea Export Bureau of Batavia publishes figures on the exportation of Java tea for 1911, showing that such shipments amounted in that year to 50,518,475 pounds, in contrast to exports aggregating, according to official statistics, 33,742,646 pounds in 1910.

The business in tea for the past year showed that the United States took some 214,141 pounds; Holland, 22,649,445 pounds; Great Britain, 15,501,522 pounds; Australia, 5,578,608 pounds; Straits Settlements, 3,237,573 pounds; Russia, 2,005,290 pounds; Canada (Vancouver), 189,660 pounds; and other countries not specified, 1,142,236 pounds. Tea exporters predict that business with the United States during 1912 will probably exceed that for last year.

CRIN VEGETAL OF ALGERIA.

[From Consular Agent Albert H. Elford, Oran.]

Vegetable fiber, or crin vegetal, is made from leaves of a dwarf palm (*Chamaerops humilis*) which clings to the soil tenaciously. Its presence was a serious obstacle to the pioneers of Algerian colonization, and it had to be fought foot by foot. It was not then known that the plant would become a source of wealth to the colony and that it would be more and more sought as a commercial product.

This palm grows abundantly throughout Algeria—in sandy coast soil, among rocky mountains, as well as in rich, deep soil. Heat, cold, rain, and drought do not harm it. While the progress of colonization has greatly diminished the area covered, the plant remains practically inexhaustible on certain mountain slopes and sand dunes.

After several attempts had been made to utilize the palm, satisfactory results were obtained in 1847. The leaves were separated by a comb into long and flexible filaments, which were twisted into rope shape. With a few modifications this method is still successfully employed. The low price of the article enabled it to compete easily and in many lines with animal hair.

Gathering and Marketing.

The palm leaves are plucked by the Arabs only when they have nothing else to do, the work being poorly paid. In years of drought it is their only resource. Treated on the spot simply and economically and slightly dried, the leaves are sold by local manufacturers to export firms on the seacoast, where, after a few days' exposure to the sun, they are made into bales of 90 to 120 kilos (kilo = 2.2 pounds) each.

Crin vegetal serves well for stuffing furniture and mattresses, important steamship lines having bought it for several years in large quantities for emigrants' mattresses. The 12 to 15 kilos needed for a comfortable mattress cost in Belgium or Germany only about 1 franc (19.3 cents). This does not include the cost of the cover, as in accordance with emigration laws only the stuffing must be removed.

This vegetable fiber, particularly the elastic quality produced in the Department of Oran, can be used for cleaning and polishing floors, wood, and brass work. Its use for domestic and other purposes is causing increased sale, replacing many other more expensive articles. Being a repellant of vermin it is of great service for barracks, colleges, hospitals, and lodgings.

The Arabs are paid 2 francs per quintal (220.46 pounds) by the local manufacturers, who sell it to the shippers at 4.5 to 5 francs, and by them resold at about 7.5 francs per quintal. There is naturally much loss in weight while in transit from its virgin form to the shipper. Sales are f. o. b., consequently freight charges must be added; these are not high, considering the volume. Freight rates per ton are 12 to 16 francs to Antwerp or Hamburg, 10 to 15 francs to Italian and Adriatic ports, \$3 to \$4 to the United States, and \$7 to \$8 to South America. Into most countries the article enters free of duty.

Exports—Price Regulation.

Up to 1875, the production of crin vegetal was absorbed locally almost entirely. Exportation then commenced. In 1908 shipments

aggregated 25,527,500 kilos; in 1909, 27,958,000 kilos; and in 1910, 34,064,100 kilos.

The most important customers are the United States, Italy, Germany, Austria, Belgium, and France. At one time, owing to active competition, shippers were sometimes compelled to sell almost at a loss. Business naturally suffered from this state of affairs, and buyers in the United States took advantage of this fall in prices to buy extensively, which explains the increase in shipments during 1910, but shippers are now syndicated, and more remunerative prices have been fixed upon.

PAPER-YARN FABRICS.

[From Consul Augustus E. Ingram, Bradford, England, supplementing articles in Daily Consular and Trade Reports of June 8, 1911, and Jan. 8, 1912.]

I have been making further inquiries and, so far as I can learn, it is too early to say that paper-yarn textiles have passed the experimental stage in England. The Silvalin Yarn Spinning Co., of Manchester, hopes soon, so I am indirectly informed, to commence operations in this country. A textile expert connected with that company has been actively at work bringing this new material to the attention of textile manufacturers throughout the country, and trials are being made at various places by technical colleges and practical business men. Two firms in this district are experimenting, and one of them informs me that it has been experimenting for more than 12 months. This firm has been kind enough to give me small samples of the textiles it has made. [These, marked "A" to "E," inclusive, will be loaned by the Bureau of Manufactures.]

The fabrics marked "A" and "B" are all paper, except where in "B" the white mottled effect is due to a cotton thread wound around the paper yarn. Fabric "C" is a cheap rough trousering suitable possibly for a warm climate. Fabric "D" is a poplin effect. Fabric "E," probably the most successful of any of these experimental weaves, is a twill venetian coating, the warp showing on the face being a crossbred wool while the weft thrown on the back is of paper. The weight of this last fabric is about 20 ounces.

In regard to this last fabric, the maker said it was woven 60 inches wide; in weaving there was no shrinkage in the width but considerable loss in length, as the warp had to accommodate itself to the stiffness of the weft. My informant stated that he was as yet somewhat dubious as to success in fabrics other than heavy cloths suitable for curtains and upholstery purposes. He was satisfied as to the cheapness of the yarn and also as to its strength ordinarily. At times, perhaps owing to imperfections in spinning, the yarn proved brittle. All the yarn being experimented with, so I am informed, is obtained from Germany.

Foreign Trade of Italy.

Consul General James A. Smith, of Genoa, writes that Italy's exports for the first three months of the present calendar year reached \$108,516,598, an increase of \$10,944,588 over the corresponding period of 1911. Imports amounted to \$161,313,187, a decrease of \$7,485,666.

HEMP FIBER FOR PAPER MAKING.

[From Consul General George E. Anderson, Hongkong.]

Twelve large paper-manufacturing concerns in the eastern portion of the United States, having an organization center in Boston, have joined in the formation of a Philippine corporation [name obtainable from the Bureau of Manufactures] which will purchase and handle for these manufacturers hemp and hemp by-products now to be had in the Philippines. The capital of the company in the Philippines is placed at \$150,000 gold, but it is stated by the incorporators that a large amount of capital is back of the venture.

The stock in the new concern is all held by paper manufacturers, and they expect to use the company's entire output in their own establishments in the United States. American machinery has already been imported to some extent and more has been ordered. Eventually a pulping factory will be established in Manila to utilize such supplies of hemp as may be purchased in the field or in an unmanufactured state, but for the present the company expects to devote its energies to the purchase of hemp which has been prepared on special machines designed to use the whole hemp plant.

Special Qualities and Uses of Hemp-Fiber Paper.

The new enterprise rests upon the demand in the United States for fiber for the manufacture of certain classes of paper of an especially strong and tough grade. Experts report that a 1-inch strip of hemp-fiber paper will sustain a weight of 100 pounds.

For the past six years or so there has been a strong and increasing demand for waste hemp, the by-product of hemp stripping in the Philippines, for use in the manufacture of this paper in connection with junk hemp from old rope and the like purchased elsewhere. It has become more and more apparent to paper manufacturers, however, that the supply of waste rope and similar hemp refuse was not sufficient for their needs, particularly if the business of making paper bags as substitutes for cloth bags for flour and cement was to be extended; and an organization was formed to conduct experiments with a view of securing a new supply of raw material. The organization back of the new enterprise reports that it has expended about \$500,000 in experiments, but that so far no substitute for manila hemp has been found.

The concern's experts report that one peculiarity of manila hemp is that it is practically all fiber in construction, and that no matter how finely the hemp is divided it is still capable of division as fiber, while a fiber of cotton, for example, is only a tiny tube, a fiber of sisal is mere nonfibrous wood, and similar objections are had to other products.

Whole Plant Used—Bag Factory.

The result has been the conclusion that, all things considered, the use of the whole of the original hemp stalk will be the most economical way out of the situation. By present methods about one-third of the ordinary plant is lost in stripping and about one-third of the remainder is not used for the reason that the fibers are too small and too weak to be of commercial use. The new plan is to take the entire hemp plant as cut on the plantation and merely crush, dry, and clean it in especially designed machines.

Even at a lower price per pound for the whole plant than he receives per pound for about half of the original plant at the present time, after expensive handling, the planter will actually receive greater returns from his product than by the present methods. The enterprise is intended to afford a new and additional supply of raw materials of the sort needed in the manufacture of special varieties of paper—a supply capable of almost indefinite extension.

There has also been incorporated in Manila by interests allied to the concern above named a company which is to manufacture paper and cotton and other textile bags of all descriptions. The firm is to enlarge the business of a factory already operating under the control of these interests in San Miguel district, Manila.

[American official records show the following imports of unmanufactured manila fiber from the Philippine Islands during the last five fiscal years: 1907—54,067 tons, value \$10,776,622; 1908—52,233 tons, value \$8,922,890; 1909—61,622 tons, value \$7,127,187; 1910—92,507 tons, value \$10,435,743; 1911—74,219 tons, value \$8,614,603.—B. of M.]

AUTOMOBILE EXHIBITION IN AUSTRALIA.

[From Consul Wm. C. Magelssen, Melbourne.]

F. Leslie Bruford, secretary of the Automobile Club of Victoria, Ludstone Chambers, 352 Collins Street, Melbourne, notifies this consulate that the committee of management, consisting of representatives of the club and dealers in automobiles, will hold an exhibition of motor cars in the Exhibition Building, Melbourne, and that applications are now being received for show space. The notification is given in order that American manufacturers and agents may avail themselves of this opportunity to bring their products before the buyers in this promising market. American cars are very popular here and it is to be hoped that our exhibits will be as elaborate and extensive as the field merits.

NATIONAL HORTICULTURAL EXHIBITION.

[From Consul General John L. Griffiths, London.]

The National Horticultural Exhibition, May 22 to 30, 1912, on the grounds at Chelsea Hospital, London, England, it is stated, will be the largest of its kind ever held. It will include every conceivable variety of horticultural product, one division being allotted to fruit, another to vegetables, another to roses, etc. It is understood that all the exhibits will not be competitive, that some of the largest and most important are being sent for the delectation of visitors. Invitations have been issued to some 350 specialists in every branch of horticulture to officiate at this exhibition.

Spanish Olive Growers' Association Planned.

Consul Charles S. Winans, of Seville, advises that at an assembly of olive growers called for May 1 it was anticipated a national olive growers' association would be formed, federating the 15,000 or 20,000 olive growers in Spain for mutual protection.

DEPRESSION IN HONGKONG SUGAR TRADE.

[From Consul General George E. Anderson, Mar. 2; see also Daily Consular and Trade Reports for Aug. 1, 1911.]

While it is perhaps too much to say that the great sugar-refining industry in Hongkong, which has long dominated the refined-sugar market of the Far East, is threatened by a combination of circumstances, the record of the business for the past year is strong confirmation of the pessimistic views held in that connection.

The year 1911 was one of particularly small trade and 1912 opens with no better prospects. The chief element in the unfavorable situation is the dominance of the North China market by Formosan sugars as a result of the development of the industry in that island. This competition on the one hand has been met by failing supplies on the other. The satisfactory crop in the Philippines last year was exported almost entirely to the United States, imports from the islands into Hongkong amounting to only 9,324 tons, in contrast to 58,978 tons in 1907.

With the contraction in the world's supplies during the latter portion of the year and the resulting high prices the market for sugar in North and Central China was further restricted; for the Chinese consumer can not pay high prices for sugar, and any material rise in quotations is followed by lessened consumption. The revolution in China, trade depression generally, and other elements combined to reduce the volume of business done by the Hongkong institutions. Nevertheless the chief cause for decreased trade lies in the permanent development of other sugar centers.

The Trend in New Directions.

The output everywhere in this part of the world is increasing, but it is not being handled and controlled in Hongkong. The manner in which Hongkong's former trade has been cut into in recent years is indicated by the following table of imports of raw sugar to be refined in Hongkong, about four-fifths being exported to China and the various markets in which Hongkong is interested:

Imported from—	1909	1910	1911
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
United States.....	2		1
Burma.....			89
China.....	12,108	14,719	8,950
Cochin China.....	5,012	3,608	2,373
Germany.....	16		38
Java.....	278,030	221,101	184,874
Japan.....			89
London.....	16	15	6
Mauritius.....	400	556	899
Hongkong New Territory.....	62	164	3,029
Philippine Islands.....	41,930	10,372	9,324
Straits Settlements.....	2,108	1,284	71
Total.....	339,684	261,819	209,743

The year 1911 was unusual in many respects, and the great falling off in business compared with 1910, and particularly with 1909, should not be taken as demonstrating too much. That the industry in Hongkong, in spite of modern equipment, cheap labor, cheap freights, and cheap transshipment facilities, is seriously threatened, however, is quite evident.

Formosan and Philippine Situation—Sales to United States.

During the past year the situation in Japan and Formosa has been characterized by increasing concentration and combination of sugar interests under Government supervision and control and, to some extent at least, with Government help.

In the Philippines the advancing output of sugar is to be further augmented not only by new plantations and increased acreage generally but also by improved methods of production. New centrals are being established in the Visayas, Negros, Cebu, and other districts. While the exports of sugar from the Philippines to the Hongkong refineries have declined in the past few years—58,978 tons in 1907, 50,492 tons in 1908, 41,930 tons in 1909, 10,372 tons in 1910, 9,324 tons in 1911—the exports of sugar from the islands in general have risen from 120,289 metric tons in the fiscal year 1907 to 149,376 metric tons in 1911. This is a peculiar course of trade, in view of the fact that raw sugar shipped from the Philippines is refined in Hongkong and reenters those islands after the payment of a duty of almost 2 cents gold per pound.

One feature of the past year's business in Hongkong has been the increasing number of small shipments of sugar to the Pacific coast of the United States—shipments which have indicated the possibility of large business under certain conditions if no trade agreements or mutual restrictions interfere.

THE JAPANESE BUDGET.

[From Ambassador Charles Page Bryan, Tokyo.]

In the Japanese budget for the fiscal year commencing April 1, 1912, the total revenue and expenditure balance at \$286,445,933, as follows: Ordinary revenue, \$251,277,903; extraordinary, \$35,168,030; ordinary expenditure, \$205,982,932; extraordinary, \$80,463,001. The sum of \$5,451,458 is appropriated for "extending steamship lines," a decrease from last year of \$19,183. A new subsidy of \$37,500 is granted to a South Sea Islands line. The aid to the North American routes amounts to \$2,223,642 (\$11,444 less than last year) and that to the South American to \$364,958. Besides this there are appropriations of \$361,768 for "encouraging navigation" and \$390,925 for the advancement of shipbuilding.

The policy of the Government is said to be one of retrenchment. The salient items of reduction in the new budget are the postponement of the Tokyo-Shimonoseki Railway broad-gauge conversion, the deferment of the improvement of secondary harbors, the abandonment of the Grand Exhibition, and the rejection of the demands for naval and military increments. Moreover, with a view to fundamental and permanent economies a bureau has been created to determine ways in which the administrative expenses may be cut down. The savings thus effected are to be applied to the next budget in the reduction of the taxes.

The sum of \$25,000,000 is to be set aside for the redemption of the national debt, and \$26,298,270 will be borrowed, of which \$20,000,000 will be used for the imperial railways and the balance for Chosen (Korea) and Formosa.

WOOLEN MANUFACTURE IN JAPAN.

[From Consul George N. West, Kobe; supplementing article in Daily Consular and Trade Reports for Dec. 27, 1911.]

Of the woollen mills of Japan, outside of Government factories for army supplies, three are in the Kobe consular district—Japan Woollen Co., Japan Flannel Co., and Muslin Weaving Co. The following statistics were obtained by a visit to the mills:

	Japan Wool- en Co.	Japan Flan- nel Co.	Muslin Weav- ing Co.
Mills.....number.....	2	1	1
Cards.....do.....	17	7	
Spindles:			
Wool.....do.....	7,035	3,500	
Worsted.....do.....	13,400		21,600
Combing machines.....do.....	10		
Looms.....do.....	480	107	750
Yarn sold.....(pounds..... value.....)		30,000 \$17,500	
Mousseline de laine.....(yards..... value.....)			11,970,000 \$2,000,000
Serges.....yards.....	1,070,000		150,000
Woolen and worsted fabrics, including flannel.....(yards..... value.....)	1,430,000 \$347,500	776,849 \$190,761	
Bunting.....yards.....	500,000		120,000
Blankets.....(pieces..... value.....)	640,000 \$400,000	51,531 \$33,175	

The Jomo Muslin Co., which is in the Yokohama district, has also furnished the Kobe consulate with data, as follows: Spindles, 12,800; sets of looms, 480; yarn sold, 360,000 pounds; cloth manufactured, 7,200,000 yards of bleached mousseline de laine, valued at 17 cents (United States) per yard.

[From Consul General Thomas Sammons, Yokohama, Mar. 9.]

Supplementing Consul West's report, it may be stated that, of the mills in the Yokohama district, the Matsui Mosurin Kabushiki Kaisha has been closed for over six months, being bankrupt, and the following statistics relate to the other two companies operating in the district:

Tokyo Mosurin.—Cards, 8; combing machines, 8; worsted spindles, 35,280; looms, 988; yarn produced for sale—1909, 1,247,473 kin (kin=1.32 pounds); 1910, 1,669,517 kin; 1911, 2,082,626 kin; gray and bleached fabrics manufactured (over 20 varieties)—1909, 13,426,374 yards; 1910, 10,450,890 yards; 1911, 14,087,055 yards; average value per yard, 13.55 cents (United States).

Toyo Mosurin.—Worsted spindles, 12,600; looms, 400; gray and bleached fabrics manufactured, monthly average, 850,000 yards; average value per yard, 13.45 cents (United States).

NEW FREIGHT SERVICE TO SOUTH AMERICA.

The Mississippi Valley, South America & Orient Steamship Co. will inaugurate a new freight service from New Orleans to ports of Brazil and Argentina the latter part of June. The *Inkum*, a modern, fully equipped steam freighter, will be the first boat over the new route and will carry a full cargo, bookings having already been made up to the vessel's capacity. A monthly schedule both ways is to be maintained. The company, which is an American organization, sees in its new service the means for a rapid development of the trade between the Mississippi Valley and Gulf States and the southern Republics.

WINTER PORT TRADE IN ST. JOHN.

[From Consul Henry S. Culver, St. John, New Brunswick, Canada.]

The winter port trade includes the vessels which in summer run to Quebec and Montreal, making St. John their terminal port from November 15 to May 1 of each year, on account of the freezing of the St. Lawrence River. Nearly all of the Canadian transatlantic passenger and freight traffic is carried on at this port during this period, a small portion only going to Halifax. This season, up to April 29, 105 steamers took away Canadian goods valued at \$15,586,117 and United States goods valued at \$10,946,950. For the 1910-11 season the 111 sailings took away \$15,322,437 of Canadian goods and \$8,346,605 of American goods.

DIESEL ENGINE FOR LOCOMOTIVES.

[From the Near East.]

As one of the results of the recent coal strike, several of the leading railway companies of Great Britain are considering the adoption of the Diesel engine for locomotives. It seems admirably suited for this purpose, and the cost of running would be considerably less than even that of oil-fired steam engines.

W. T. Batho stated in a paper read before the Cleveland Institution of Engineers that a Diesel engine of 1,000 horsepower and weighing 85 tons had been built in Germany. This type of locomotive should be very useful in those countries of the Near East in which fuel oil is cheap and plentiful as compared with coal. Whether the other points in which steam excels the crude-oil engine, such as flexibility in power and ease of handling, will outweigh the reduction in running cost is a problem that can be settled only by experience.

GASOLINE-DRIVEN RAILROAD CARS.

[From Consul Walter C. Hamm, Newcastle-on-Tyne, England.]

The North Eastern Railway Co. has introduced a novelty in the form of a petrol-driven car, to be used for inspection purposes by the executive and district officers. Hitherto the work has been done with a coach drawn by an engine. The new cars, of which two have been built, are to be stationed at Newcastle and York, respectively. Each vehicle is 23 feet 6 inches long and 8 feet 6 inches wide. There is a saloon 16 feet long, with driver's compartments at each end. Three speeds of 15, 22½, and 45 miles per hour are provided.

New Markets Needed for Argentine Meat.

The minister of public works of the Province of Buenos Aires has called attention to the fall in prices of Argentine meat in London. He states that since 1908 the average price obtained for Argentine meat has fallen from 43¼ centavos (41.8 cents United States) per kilo (2.2046 pounds) to 36¼ centavos (35 cents) last year, and that consignments of excellent meat have been sold as low as 15 centavos per kilo. The minister holds it absolutely necessary that new markets for Argentine meat should be opened up. He regards Italy as a promising market, and states that the Italian Government had negotiated for the purchase and delivery of 30,000 cattle during the current year, but that difficulties in connection with the transport had not permitted the contract being concluded.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8796. Lumber and woodwork for building purposes.**—An American consular officer in the Levant reports that an important concern in his district dealing extensively and exclusively in lumber is desirous of importing American lumber and woodwork for building purposes. The concern in question is especially interested in pitch pine.
- No. 8797. Fertilizers.**—A report from an American consular officer in a European country contains the information that there is a great demand for fertilizers in his district, as well as throughout the country. American producers should send their offers at once in English to a business man whose name is given in the report. Prices should be quoted either f. o. b. New York or c. i. f. city of destination. The percentage of phosphate or fertilizing salt contained therein should be stated also.
- No. 8798. Fish meal.**—A business man in Germany informs an American consular officer that he desires to obtain the agency for an American fish meal, for feeding purposes as well as for fertilizing.
- No. 8799. Construction of breakwater.**—The American consul general at Ottawa, Canada, reports that the Department of Public Works has advertised for tenders, to be received until May 23, 1912, for the construction of a breakwater at Trout Cove, Digby County, Nova Scotia. Plans, specifications, and form of contract can be seen and forms of tender obtained at the Department of Public Works at Ottawa, and at the offices of the district engineers, Halifax, Nova Scotia, and St. John, New Brunswick; also from the postmasters at Yarmouth and Centreville (Trout Cove), Nova Scotia.
- No. 8800. Shoes, rubbers, woolen goods, and paper.**—One of the commercial agents of the Department of Commerce and Labor reports that a resident of a country in the Near East would like to represent American manufacturers of shoes, rubbers, woolen goods, and paper of all kinds. Firms that are especially interested in securing Government contracts are preferred, although the person in question has good facilities for selling goods in the open market.
- No. 8801. Paper for wrapping camera films.**—An American consular officer in Germany reports that a business man in his district desires the names of American manufacturers of black paper, samples of which can be obtained from the Bureau of Manufactures, such as is used for packing and wrapping camera films. He states that he is constantly in need of large quantities of this article.
- No. 8802. Creosoted Douglas fir sleepers.**—A Government official in a foreign country has informed an American consular officer that it is proposed to advertise shortly for tenders for the supply of 90,000 creosoted Douglas fir sleepers for trial on certain railways. American firms in a position to supply these sleepers should get in touch with this official at once.
- No. 8803. Agency for cinematograph companies.**—An American consul in a Mediterranean country reports that a merchant in his district desires to represent American cinematograph firms. It is stated that a good business is carried on in imported films, as the moving-picture shows are some of the chief amusements. Correspondence may be in English, and full particulars should be sent as soon as possible.
- No. 8804. Heating, cooking, and other gas appliances.**—A report from an American legation states that one of the engineers of an electrical company in the country in question would like to receive catalogues from American manufacturers of all kinds of heating, cooking, and other gas appliances.
- No. 8805. "Mississippi" buttons.**—A business firm in a European country informs an American consular officer that it desires to purchase "Mississippi" buttons, supposed to be made of a white substance similar to mother-of-pearl. Correspondence may be in English.
- No. 8806. Collodion acetate.**—An American consular officer in the United Kingdom reports that a firm in his district desires the names of manufacturers of collodion acetate.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 639. Navy Department supplies.**—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until May 28 for fuel oil, schedule 4550. Tenders are invited until June 4, 1912, for the following supplies: Schedule 4560, coal baskets, Port Orford cedar, plow steel wire rope; schedule 4545, brass covers, nickel steel recoil cylinder, recoil cylinder, recoil springs, steel castings, spring rod nickel steel, rod spring steel; schedule 4555, white glue, bits and steel cutters for boring and molding machines, band and scroll saws; schedule 4549, baking powder; schedule 4542, knife switches; schedule 4547, redwood; schedule 4543, comparing watches, stop watches; schedule 4556, hull steel rivets, steel bolts and nuts, steel stove bolts with nuts, tinned soft steel rivets, black wrought-iron or steel washers, wrought-iron bar; schedule 4559, steel bolts and nuts, stud bolts and nuts, steel rivets; schedule 4546, electric jib crane; schedule 4548, chucks, convex cutters, shell reamers, slitting saws; schedule 4561, ingot copper; schedule 4557, medium steel angles, bar steel, medium steel bars, galvanized bar steel, nickel bar steel, round cold-rolled steel, steel plates, galvanized medium steel plates, galvanized sheet steel; schedule 4544, ingot tin; schedule 4551, fuel oil; schedule 4554, engine distillate; schedule 4558, cast-iron pipe fittings, galvanized or wrought pipe, malleable iron unions.
- No. 640. Condemned Navy material.**—There will be sold at the navy yard, Charleston, S. C., the following articles belonging to the Navy, condemned as unfit for use therein: Launches, furniture, hose, dishes, hawsers, clocks, engine, scrap metal, etc. The sale will be for cash to the highest bidder, by sealed proposals to be opened May 20, 1912. Schedules containing form of proposals and terms of sale can be obtained upon application to the General Storekeeper, Navy Yard, Charleston, S. C.
- No. 641. Piles and lumber.**—Sealed proposals for furnishing and delivering piles and lumber on the river bank or wharves in Southwest Pass, Mississippi River, will be received at the United States Engineer Office, Room 325, Customhouse, New Orleans, La.
- No. 642. Waste paper.**—Sealed proposals for the fiscal year commencing July 1, 1912, will be received until May 21, 1912, for purchase and removal of waste paper. The estimated quantity of waste paper for the year is 600,000 pounds. It is required that the paper be removed weekly from each of the several buildings. Blank forms for proposals may be obtained by application to the Secretary of the Interior, Washington, D. C.
- No. 643. Aerial paper insulated cable.**—Sealed proposals, in duplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until May 20, 1912, for aerial paper insulated cable, in accordance with specifications 197-B and 554. Specifications, etc., can be obtained from the commanding officer of the above department of the service.
- No. 644. Frame buildings.**—Sealed proposals will be received at the Indian Office, Washington, D. C., until June 5, 1912, for furnishing materials and labor for the erection of a frame school building and frame quarters at the Twin Lakes Day School, White Earth Indian Reservation, Minn., in strict accordance with the plans, specifications, and instructions to bidders, which may be examined at the Indian Office, the offices of the supervisor of construction, Denver, Colo.; the Improvement Bulletin, Minneapolis, Minn.; the Times, Crookston, Minn.; the Pioneer, Bemidji, Minn.; the United States Indian warehouses at Chicago, Ill., St. Louis, Mo., and Omaha, Nebr.; the Builders and Traders' Exchange at St. Paul, Minn.; and at the school. For further information apply to the superintendent of the White Earth Indian School, White Earth, Minn.
- No. 645. Life-saving station buildings.**—Sealed proposals will be received at the office of the United States Life-Saving Service, Treasury Department, Washington, D. C., until May 18, 1912, for the construction of a new life-saving station building, outbuildings, etc., at Rockaway Point, Long Island, N. Y. Specifications, etc., can be obtained of keeper of station, Rockaway Beach, N. Y.; superintendent of life-saving district, Bay Shore, N. Y.; superintendent of construction, 507 Hudson Street, New York, N. Y., or at Treasury Department.

RAPID-TRANSIT VEHICLES FOR INDIA.

[From Consul José de Olivares, Madras.]

Through an inadvertency, in my report published in *Daily Consular and Trade Reports* on February 13, 1912, the dimensions of the city of Madras were erroneously stated. The correct measurements of the city, as supplied to this consulate by the corporation engineer, are as follows: Average length, $8\frac{1}{2}$ miles; average breadth, $3\frac{1}{4}$ miles; actual area, 27 square miles.

The ample distances characteristic of Madras are further contributed to by successions of villages, which, although actually outside the corporation limits, are practically extensions of the metropolis and connected with it by continuous, well-kept roadways.

So great are the distances daily traversed by the people living in and about Madras and so insufficient the local public transportation facilities that the requirement of private facilities for getting about with due celerity has developed into an urgent and ever-increasing need. It is this condition that has brought about the large and growing demand hereabouts for bicycles, motor cycles, and automobiles.

Maintaining American Prestige.

The advent of motor vehicles in Madras is of comparatively recent date, but within a very brief interval they have to a great extent supplanted carriages drawn by horses, which formerly constituted the chief means of transportation among the European contingent.

American-made motor vehicles have, in the face of much opposition and prejudice, succeeded in winning a foothold in this consular district, and it is earnestly hoped that the manufacturers and exporters of the United States will follow up the prestige thus gained by inaugurating an aggressive campaign looking to the eventual supremacy of the American motor vehicle in Madras.

Such a campaign in behalf of American vehicles adapted to the needs of this community may count upon the fullest cooperation of this consulate, and also, I firmly believe, upon a genuine interest and responsiveness on the part of dealers and purchasers throughout the district.

MARKET BAGS IN BRITISH ISLES.

[From the official Indian Trade Journal.]

It is understood that the United Kingdom imports bags, called "market bags," which are made of matting or "bass" and used in large numbers by fishmongers and greengrocers. Advices encourage the belief that a good trade in the superior qualities of bags of this description might be done in Germany, where it is the practice of ladies of all but the highest position to do their own marketing. It is stated that these bags are usually shipped from China in large bales containing 400 sets—each of three sizes—say 1,200 in all. The range of sizes is 18 by 12 inches, 16 by 10 inches, 14 by 10 inches, and 13 by 8 inches, the bottom having a concertina fold to admit of their expanding. The bags should be plaited as lightly as possible, the handle being made of the same material as the bag; but, failing this, a strong cord made of hemp or other kindred material will answer the purpose equally well. In order to ship the bags at the lowest freight rates, bags of the three sizes should be placed inside each other and the whole should be packed in hydraulic-pressed bales. The wholesale price of the ordinary quality of these bags is about 50s. (\$12.16) per bale, c. i. f. London, but it is stated by certain buyers that a better price might be paid for a superior quality.

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WORLD RAILWAY DEVELOPMENT.

RAILWAY BUILDING IN FORMOSAN MOUNTAINS.

[From Consul Samuel C. Reat, Tamsui.]

The Railway Department of the Formosan Government is building a mountain railway that will elicit favorable criticism from the engineering fraternity in many countries. This construction involves steep gradients, sharp curves, a picturesque spiral, and many tunnels and bridges. The entire railway will cover 41 miles, from Kagi to Mount Ari station (Nimandaira)—the latter point being 7,000 feet above sea level.

From Kagi to Chikutoki, 9 miles, the grade is 1 in 50. From Chikutoki, Nimandaira is reached after a 32-mile zigzag climb up the mountains to 7,000 feet, the gradient being 1 in 20, or 5 per cent. Nearly the entire line (80 per cent) is sinuous, the sharpest curve being 35 degrees. To reach Nimandaira the railway must circle a peak spiral fashion. The spiral construction begins at 1,824 feet and ends at an elevation of 2,500 feet. Between Kagi and Mount Ari there are 70 bridges, 73 tunnels, and almost innumerable cuts.

The Rinnai or forest railway is 18 miles long, is tortuous, and has a gradient of 1 in 16. This railroad is called the Mount Arisan line, Mount Ari lending its name to the railway as well as to the giant forests that are the objective point of the undertaking.

Overcoming the Difficulties—Importance of the Line.

The exploitation of the valuable forest of Mount Ari is no new enterprise. Years ago a private company surveyed a line and commenced constructing a road. But the undertaking was abandoned after futile attempts to interest private capital. Then the Government was approached to take over the property of the private concern

and carry forward the work. After considerable discussion in the Imperial Diet an appropriation of \$2,450,000 was made in 1910 for the Mount Ari forest exploitation. Practically the operation and property of the private company were of no value, and the work was started anew. The most capable engineers of the Government are directing the construction, and difficult obstacles are being rapidly overcome.

Aside from the extension of the frontier lines, no undertaking by the Formosan Government is more important to the island's development than the Mount Ari enterprise. Not only is it an important undertaking, but it is a picturesque one. The traveler reaches Mount Ari station now by sedan chair, with the clouds way below him; above him is scarcely any demarcation between earth and sky. When this altitude is gained, he looks upon a magnificent primeval forest, some trees of which are 2,000 years old, 135 feet high, 65 feet in circumference at the base, 25 feet at the capital, with no branch visible until a height of 45 feet. Such trees as the *Chamaecyparis obtusa* (Hinoki), red *Chamaecyparis* (Benihi), and oak, forming the three useful species, may be taken as the chief object of the sylvan industry.

Value of American Equipment Recognized.

American manufacturers should be interested in this Mount Ari forest exploitation, because American locomotives and American machinery are almost exclusively employed. At present two American-built locomotives (the Shay high-g geared type) are operating on the mountain section, the gauge being 2 feet 6 inches. Two new locomotives of the same type have been ordered from the Lima (Ohio) Locomotive & Machine Co. The rails for this railroad were also bought in the United States.

At Kagi, where this line begins, there will be erected an American sawmill—the Allis-Chalmers Co., of Milwaukee, having recently been awarded a contract involving \$150,000. The Laderwood Manufacturing Co., of New York, is furnishing a log-handling apparatus at a cost of \$25,000. The entire railway will be finished probably by January, 1913, when logs will be delivered from the forests of Mount Ari to the American-built sawmill at Kagi. The Mount Ari undertaking was first reported by this consulate in Daily Consular and Trade Reports for January 24, 1910.

For blue prints and information this consulate is indebted to S. Niimoto, Chief of the Imperial Formosan Railway. Blue prints and photographs are being forwarded [and upon receipt will be loaned by the Bureau of Manufactures at Washington.]

WESTERN JAPAN LINES.

[From Consul Carl F. Delchman, Nagasaki.]

New Government Railways.

The Imperial Government Railways report increased earnings on all their lines in this district, opened several sections of branch lines during 1911, and are making surveys for extensions. The Oita branch line from Kokura, on the main line from Moji, to Oita on the north-east coast of Kiushu, was completed and the last section (40 miles)

between Yanagigawa and Oita opened to traffic on November 1, 1911. Construction of this section was commenced in April, 1908, and the total expenditure was \$2,115,504, or about \$53,136 per mile. There are 7 tunnels, with an aggregate of 5,189 feet. 100 bridges aggregating 5,810 feet, and 11 stations. As the various sections have been completed they have been opened to traffic, that to Beppu Hot Springs having been opened in July, 1911.

Building of Private Lines.

The privately owned light steam railways in different parts of Kiushu Island now in operation report good earnings, and they are rapidly developing the sections through which they run. The Shimabara Railway in Nagasaki Prefecture and the Dai Nippon and the Kikuchi Railways in Kumamoto Prefecture are extending their lines, while one new line is under construction and charters have been granted to six new companies to build light steam railways in Kumamoto, which embraces the principal agricultural district of the island. In Oita Prefecture four companies have received charters to build light railways and in Kagoshima Prefecture one charter has been granted. Work has not yet begun on these lines, however.

CHINESE RAILWAY ENTERPRISE.

[From Consul Julian H. Arnold, Amoy.]

The Fukien Railway Co., a local Chinese company engaged in building a road from Amoy to Chang Chow, 30 miles distant, has completed about 18 miles of its road and exhausted its funds (\$1,000,000). To complete the line will require \$300,000 for a bridge and \$150,000 for the remainder of the road. The 18 miles now completed are being operated at a loss of \$1,500 a month; 10,000 passengers a month are carried, but the hauls are too short to net the company a profit. Last year a promise of \$150,000 was secured from the Chinese in Java, to go toward completing the road to Chang Chow city, 30 miles from Amoy, after which it is estimated the road will be on a paying basis. The company is to be reorganized and, according to reliable reports, Dr. Lim Boon King has been appointed to effect reorganization and will be empowered to raise the necessary capital to complete the construction of the road.

TRAMWAY LINE IN CANARY ISLANDS.

[From Consul W. W. Kitchin, Tenerife.]

The Electric Tram Co., composed of Belgian capitalists and employing modern methods and equipment, materially improved its system all along the line last year. The 15-mile extension from Tacaronte to Orotava has not been consummated and the prospect looks forlorn, for the reason that, besides being an expensive road to build because of the unusual gradients, the company would, as heretofore, have to give the Government the usual 25 per cent of the gross receipts. As this leaves a very small margin of profit at present, it would leave still less, if any, on the road projected.

The completed portion of the road consists of two sections of approximately 7 miles each, from Tenerife to Laguna, and again from the latter place to Tacaronte. Laguna has 15,000 and Tacaronte

nearly 3,000 inhabitants; both have altitudes of over 1,800 feet. The power works are situated at Cuesta, a village with an altitude of about 600 feet, nearly midway between Tenerife and Laguna. This work is elaborate and up to date. Two engines (direct-action) drive the dynamos (Dulait system), which work up to 200 kilowatts. Galloway boilers, Green economizers, and Tudor accumulators are included in the equipment. The condensing water is cooled by a tubular refrigerator (Koerting system). On account of the steep inclines, each car is equipped with two 50-horsepower motors. Apart from the actual beauty of the journey, the ride is interesting as an example of modern electrical engineering (Belgian).

ROUMANIA.

[From American Minister John B. Jackson, Bucharest.]

New Railway Concession.

A bill has been introduced in the Roumanian Parliament authorizing the district of Prahova to grant a concession for constructing and operating an extension of the private railway from Ploeshti to Valeni de Munte as far as Maneciu-Ungureni, and to contract a loan of 2,500,000 francs (franc=19.3 cents) for the purpose, which is to be issued as necessary. The new line is to be built in two sections, from Valeni to Homoraeni and from Homoraeni to Maneciu-Ungureni, and work on the second section is not to begin until after the first is in operation. The estimated cost of the first section is 1,800,000 francs and of the second section 1,200,000 francs, the income derived from the whole line from Ploeshti being applied in connection with the proceeds of the loan. The object is to open up additional petroleum lands.

AUSTRIA-HUNGARY.

[From the Wiener Zeitung, Vienna.]

Municipal Railway for Carlsbad.

The Austrian Ministry of Railways announces the grant of a concession to the municipal authorities of Carlsbad to construct and work an electric railway in that town. Eighteen months are allowed for carrying out the work.

ENGLISH RAILWAY AFFAIRS.

[From Consul Benjamin F. Chase, Leeds.]

Receipts from Trackless Trolleys.

The cost of constructing trackless trolley systems in England was given by a recent lecturer as \$15,000 per mile of route, as against \$50,000 per mile for the usual rail system. The cost of working is about 11 cents per car mile. Receipts depend upon local conditions. At Leeds they were given as 21 cents per car mile and at Bradford 16½ cents.

Leeds Tramway Earnings.

The city tramways last year showed an increase of almost \$2,500 a week in earnings over the year before. The mileage for the year was 8,528,210, an increase of 219,771. [Detailed accounts of the Leeds tramways appeared in Daily Consular and Trade Reports for June 21, 1909, Sept. 23, 1910, and Jan. 10, 1911.]

Wages and Hours in the Railway Service.

The Board of Trade in a recent report gave some interesting statistics as to wages of railroad workers. The statistics quoted do not include "other workers" on the railway and give the numbers and average wages (including bonus) of "6-day workers" in the principal grades of adult workmen:

Occupation.	Number paid wages.	Average rate of wages.	Average actual earnings.
Engine drivers.....	26,430	\$9.80	\$11.17
Goods guards and brakemen.....	15,643	6.86	7.34
Passenger guards.....	6,586	6.75	7.12
Signal men.....	26,849	6.17	6.69
Firemen.....	26,029	5.80	6.67
Shunters.....	14,097	5.78	6.23
Porters (goods).....	18,506	5.05	5.31
Laborers (permanent way).....	27,197	4.87	5.27
Plate layers and packers.....	44,355	4.73	5.13
Porters (coaching and traffic).....	18,146	4.54	4.80

The hours of duty in a full week, exclusive of meal time and overtime, for adult "6-day workers" average 58; for engine drivers and firemen, 62 hours; guards, 61 hours; porters, 60 to 61 hours; signalmen, 57½ hours; shunters, plate layers, and laborers, 55 hours. A considerable proportion of railway employees receive allowances of uniform or other clothing, house rent free, etc., in addition to their cash wages. Some of the engineers work on the trip system, and thus make better wages. The newspaper account of this report says further:

For the United Kingdom as a whole the rates of wages of over one-fourth of the adult workmen were less than \$4.87 a week. Nearly two-thirds were rates at less than \$6.09. Less than one-fifth were rated at \$7.30 or over, and only 5½ per cent had rates of wages as much as \$9.73. The number of men rated at less than \$4.87 was about 95,000. These particulars relate to the rates of wages for a full week's work and do not include any bonus earned. The proportion whose actual earnings fell below \$4.87 was 22 per cent; 50 per cent earned less than \$6.09; nearly 29 per cent earned \$7.30 or more; and 9 per cent earned \$9.73 or more.

[A lengthy report on wages paid on British railways appeared in Daily Consular and Trade Reports for Apr. 30, 1908.]

RAILWAY ELECTRIFICATION IN GERMANY.

[From the Borsen Zeitung, Berlin.]

The Prussian Landtag has under consideration a memorandum containing comprehensive proposals for electrifying and improving the Berlin city and suburban railways in order to render them capable of dealing with the increasing traffic. With this object in view it is proposed to set up two electric generating stations, one in a lignite district, probably near Bitterfeld, and the other near Berlin, the latter as a reserve station and to supplement the other during the heaviest periods of traffic. The work will involve the laying underground of six pairs of cables of 60,000 volts tension. The total cost of the work, which will take about 4½ years to carry out, is put at \$30,000,000, of which \$12,000,000 is earmarked for permanent way and constructional work, etc., and the remainder for the provision and alteration of rolling stock. It will be necessary, inter alia, to provide 557 electric locomotives and 690 passenger coaches.

[From the London Times.]

Statistics of Traffic.

The local services on the Berlin Stadtbahn, which is a portion of the Prussian Government railways, have to deal with a very heavy and ever-increasing traffic, notwithstanding the extensive systems of electric tramways and electric underground and elevated railways serving the city. Since the opening of the Ringbahn, or

inner circle, which connects all the Berlin railway stations, the population of Berlin has shown a tendency to live farther and farther out of the city. In 1895 the Stadtbahn carried over the inner circle 75,000,000 passengers, while in 1909 the number had increased to 157,000,000. The suburban traffic amounted in 1895 to 41,000,000 passengers, while in 1909 it had increased to 137,000,000. The Sunday and holiday traffic is especially heavy on the suburban section.

The population of Berlin itself, served by the circle lines, has increased from 2,017,000 in 1895 to 2,898,000 in 1909, while the population of the suburbs has risen from 382,000 in 1895 to 807,000 in 1909. The number of trips per capita per year has very greatly increased. While the suburban population was carried 107 times in 1895, the number had risen to 170 times in 1909.

Necessity for Electrification—Character of Rolling Stock.

Under present steam conditions, with the heaviest tank engines admissible, it is not possible to operate more than 24 trains per hour in each direction, each train having a seating capacity of 488 passengers. The minimum service that will meet the requirements of 1916 would be rendered by 30 trains an hour, each seating 610 passengers. As it is impossible to increase the length of the trains and use two engines, electrification has been decided upon, and electric locomotives chosen rather than multiple-unit motor-car trains.

The electric trains at the hours of heaviest traffic will consist of thirteen 6-wheel coaches propelled by two electric locomotives, one in front and one at the rear. During the slacker periods the trains will be halved and handled by one locomotive. By fitting the end passenger coach with a controller it will be possible to control and drive the half trains from either end. The use of compartment coaches with side doors has for many years given every satisfaction and enables trains to be rapidly filled and emptied.

Power Stations—Cost of Equipment.

The locomotives will run on the single-phase system with an overhead contact line pressure of 15,000 volts at 16 $\frac{2}{3}$ periods. This system has yielded satisfactory results on other lines. The power required will be supplied from two power stations. One of these will be located at Bitterfeld on a brown-coal field about 80 miles distant, whence the power will be transmitted by underground cables at a pressure of 60,000 volts. The other station will be in Berlin and will deal with the peak loads. Each is designed for a plant capacity of 100,000 kilowatts.

The estimated cost of the power houses and of the transmission is \$21,420,000, and will be provided by a separate company. Careful consideration has convinced the Prussian Government of the advantage of purchasing rather than producing energy for itself, but it has reserved far-reaching powers of supervision as regards management.

The total capital expenditure, excluding power station, transmission, and substations, is \$11,900,000 for overhead equipment, alterations and additions to stations, repair shops, low-tension feeders, and distribution, and \$17,457,300 for electric locomotives, provision for heating and lighting trains, drivers' compartments, and additional new rolling stock. It is intended to order 557 electric locomotives and 690 additional passenger coaches, with 29 repair and inspection coaches. The whole electrification is to be completed in four and one-half years.

NEW LINE FOR BESSARABIA.

[From Consul John H. Grout, Odessa, Russia.]

In addition to the new railways for South Russia mentioned in Daily Consular and Trade Reports for February 26, 1912, another railway under favorable consideration is a projected line to connect the town of Akerman with that of Leipzig, on the Southwestern Railway, the distance being about 100 miles, and to cost \$3,090,000. This line, if carried through, will be of great benefit to the Province of Bessarabia.

RAILWAY BUILDING IN CHILE.

[From Consul Alfred A. Winslow, Valparaiso.]

For the past year railway construction made good progress, especially on the Arica to La Paz line, the Longitudinal north of Valparaiso, and the Lebu to Los Sauces line south of Concepcion. The

last rail on the former line was laid on March 2, 1912, and it is proposed to open it for traffic in June of the present year.

The first double-track railway bridge ever built in Chile was completed at a cost of \$365,000, after being four years in construction.

The electrification of the first section of the Government railway is still under consideration, after a favorable report by the committee of experts. The Government is moving cautiously, and is studying the different systems. Many believe the work will be begun in 1912.

The Longitudinal to Puerto Montt was practically completed at the close of 1911 and is to be opened to traffic early in the present year. This line opens up a fertile, heavily timbered section of country that will add much to the wealth of Chile.

THE TRAMWAYS OF BUENOS AIRES.

[From Consul General R. M. Bartleman.]

The tramway service of Buenos Aires is unexcelled in the number of enterprises in this direction, the territory served, the cheapness of the passages, and the regularity and speed with which the greatest distances are covered. It is claimed that in proportion to the urban radius and the population there is no other city in the world better served in these respects than the Argentine capital.

The tramways have been an important factor in the progress of Buenos Aires by assisting in scattering the population to the farthest limits of the city and in establishing populous centers which are gradually being brought nearer to each other and forming a part of the whole.

The statistics in this case are a convincing proof of the efficiency of the tramways. These show the enormous development of city traffic. This development is surprising not only when compared with that of other cities, but also when compared with that of Buenos Aires a few years ago. In 1873, when the greatness of the city began to be realized, the tramways carried 13,156,350 passengers; 10 years later, when in the period of the horse cars, the total number of passengers was augmented to 17,965,437; a decade later, due to the increased population of the city, 57,799,362 passengers were carried. With the change from horse cars to electric cars came a great improvement and extension of the systems in all their ramifications, and the number of passengers carried multiplied beyond the most sanguine expectations. During the year of 1911, just past, 355,531,182 passengers made use of the facilities offered, the companies receiving \$14,969,446 (United States gold) in fares.

LUBRICATING OILS FOR BELGIAN STATE RAILWAYS.

Telegraphic advices from American Minister Larz Anderson at Brussels announce the removal of the discrimination which has existed against American lubricating oils in connection with public tenders for supplies for the Belgian State railways. The specifications for supplies have in the past called for Russian oils, thus preventing American oils from competing. The action of the Belgian Government follows representations on the subject of American lubricating oils made by the United States Government.

CONSTRUCTION WORK ABROAD.**NETHERLANDS.**

[From Consul Frank W. Mahin, Amsterdam.]

New Hotel Project in Amsterdam.

Amsterdam has several excellent hotels, ranking as first class, but at times their capacity is wholly inadequate to the demand. In the summer tourist season, it is impossible to obtain accommodations in any of them without engagement long in advance, and this is substantially the case with the minor hotels and the pensions; and in the seasons when buyers of diamonds and tobacco are most numerous the same is true of the first-class hotels, and many such buyers, it is said, go to Harlem and Utrecht for night accommodations.

This condition, it is believed, shortens the stay of visitors to Amsterdam and probably prevents some strangers from coming here at all, and in recent years has given rise to various inchoate projects for new hotels. One of these now seems destined to fruition. Its nucleus is the Philadelphia Hotel on the Leidschekade. This building, with three buildings on its right and two on its left, will be razed or reconstructed for the new hotel. It will have a frontage of about 130 feet, contain 200 beds, and have 45 rooms with baths. The cost of the project and other details are not yet given out, but it is promised by the promoters that the hotel shall be strictly first class.

NORWAY.

[From the London Times.]

Big Hydroelectric Power Enterprise.

An interesting hydroelectric power scheme, calculated to represent a capacity of more than 200,000 horsepower, is proposed in Norway. It is a question of regulating the Aura and Lilledal Rivers and lakes and those of Mardola at Eikisdal. The lakes highest up in the Lesje district are to be dammed up, the Vangsvandet and the Gaut Lake each 5 meters (meter=3.28 feet), and the Aur Lake, 18½ meters, whereby the level of the Grunning Lake will rise 10 meters. The dam below the Aur Lake will be several kilometers long and the most important in Scandinavia, costing some \$1,500,000. The water from the Stordal streams will also be led to the Aur Lake through a tunnel in the mountain rather more than 1 kilometer (0.62 mile) long.

From the Aur Lake either the water is to be led along its natural course to a power station in the Eikis Valley, where the Mardola will also be exploited, or the Aura River will be taken through a tunnel to the Lilledal River and the two exploited together at Haarstad, near the Sundal Fjord, in which case the Aura River would be transferred to another valley. If the former alternative is chosen the water will pass through a tunnel some 18 to 19 kilometers long to a point on the mountain high above the southern end of the Eikisdal Lake, and the Mardola River will be led to the same point through a tunnel some 2 kilometers long. From this point the turbine conduits lead to the power station at Kuhammeren, which will have an aggregate capacity of 163,000 horsepower, of which 148,000 will come from the Aura and 15,000 from the Mardola. The exploitation of the latter will cost some \$1,500,000 and that of the former river some \$8,078,000 if the Eikisdal location is chosen. Thence the power will have to be transmitted some 28 kilometers to the Romdals Fjord. The hills are very steep and it would in many places be necessary to pass the cable through tunnels, a course which would make the transmission very expensive, involving an expenditure of \$1,000,000 to \$1,210,000.

For these reasons the other alternative, that of leading the Aura into the Lilledal River, has been proposed. According to this plan the Mardola River, with its 15,000 horsepower, will remain at Eikisdal, with another 15,000 horsepower from its auxiliaries. In order to take the Aura into the Lilledal a tunnel 5½ kilometers long would be constructed through the watershed separating the Aur Lake and the Sandvandet Lake,

the Torbu Lake, higher up, being regulated by a dam. The waters of the Sandvandet, the Langvandet, and the Osbuvandet would be raised by one large dam, calculated to cost some \$803,000, the Skarvedal River would be shut off and led in a tunnel to some lakes which have their outflow into the Langvandet, so that all the waters of this system would be included in the regulation. When the water from these diverse sources had been collected a tunnel about 11 kilometers long would convey the water from the Holbu Lake to a point above Haarstad. Where this tunnel passes under the Reusvandet River a communication would be formed, so that the water of that stream would also be absorbed by the tunnel.

The Lilledal waters by themselves represent 63,000 horsepower and their exploitation would entail an expenditure of some \$375,000. The Aura by this scheme would yield 122,000 horsepower at an outlay of \$6,000,000. The power station at Haarstad would thus have at its disposal an aggregate of 185,000 horsepower at a cost of about \$10,000,000.

The installation will be attended by some disadvantages; considerable areas will be flooded, and fishing and shooting in the district will be materially interfered with.

FRANCE.

[From Consular Assistant Bartley F. Yost, Paris.]

Building Operations.

A local newspaper devoted entirely to news in regard to the construction of buildings recently published the following notices, which may be of interest to American plumbing and house-furnishing firms. The location, proprietor, architect, and number of stories of each building for which building permits have been asked for are fully indicated:

Avenue de l'Opera, 28 et Rue Gaillon, 6, architect M. Nenot, Rue de la Sorbonne, 17; two stories; Avenue de Segur, 51, proprietor M. Hugon, architect M. Vasseur, Boulevard de Clichy, 62, one story; Impasse de Menilmontant, 23, proprietor M. Rayez, architect M. Morgand, Boulevard Voltaire, 215, six stories; Rue de Tolbiac, 156, proprietor M. E. Regaud, Rue de Villersexel, 1, seven stories; Rue Berrault, 69, proprietor M. Villatte, architect M. Toussaint, Avenue Feix-Faure, 37, one story; Vill-d'Alesia, 6, proprietor M. Sandoz, architect M. Jaccottet, Rue Michelet, 7, one story; Boulevard Lefebvre, 33, proprietor M. Beauvais, architect M. Deloeil, Rue Chamaignonnet, 66, one story; Rue Lefebvre, 2, proprietor M. de Lamothe et Cie., architect M. Thomas, 28 Rue Nollet, seven stories; Rue Lefebvre, 4, proprietor M. de Lamothe et Cie., architect M. Thomas, 28 Rue Nollet, seven stories; Rues Decamps et Eugene-Delaurois, proprietor Mmes. Charvet et Stasse, architect MM. Bertraud et fils, 152, Boulevard Malesherbes, seven stories; Rue du Colonel Renard, 3 and 5, proprietor M. Loewe, architect M. Preslier, Rue de la Villa-Yvette, seven stories; Rue Duhesme, 21, proprietor and architect M. Blaise, Rue Damremont, 62, two buildings of six stories; Rue Hericart, 6, proprietor M. G. Martin, architect M. F. Martin, Rue Mozart, 28; Villa Faucheur, 1, proprietor M. Masson; Rue des Orteaux, 77, proprietor M. J. Leclerc, architect M. Lauton, 126 Avenue Philippe-Auguste, five stories; Rue des Montibeufs, 8, proprietor M. Desgoute, architect M. Foulon, 5 Rue Guilhem, three stories; Rue Raynourd, 14, proprietor MM. P. et E. Verlet, architect M. Plousey, 158 Rue du Temple, two buildings of eight stories; Villa Damremont, 8, proprietor M. C. Louis, architect MM. H. et E. Cambon, 4 Rue Dautancourt, six stories; Rue de l'Escout, 10, proprietor Mme. Vve Rigout fils, architect M. Merle, 29 Rue de la Chapelle, four stories; Rue de la Mare, 93, proprietor Mme. Ricot, architect MM. Moreau et Giraud, 10 Rue Meynadier, five stories; Rue des Ormeaux, 17, proprietor M. Bournazel, architect M. Cottet, 5 Rue Emile-Gilbert, one story.

RUSSIA.

[From Consul John H. Groat, Odessa; supplementing report of Consul General Snodgrass in Daily Consular and Trade Reports for May 23, 1912.]

Proposed Volga-Don Waterway.

The Volga and Don Rivers greatly converge in their lower courses, so that at one point, between Kalach and Tsaritsyn, they are only 45 miles apart. Here they change directions; the Volga flows south-

east into the isolated Caspian Sea, while the Don runs southwest into the Azov Sea, and thus through Black Sea and the Mediterranean, connects with the ocean. From time immemorial traffic has passed across this narrow but comparatively high ground of the Volga-Don isthmus. The traders of the early and middle ages even hauled their craft over this neck of land. Several small attempts have been made to connect these rivers, one historical effort being that of Kassim Pasha in 1567. Then the region came into the possession of Russia, the east to west trade routes at the same time undergoing great changes, and interest in a Volga-Don canal ended.

Since vast and important possessions have been acquired in Central Asia, and since the Baku naphtha industry has developed, Russian interest has grown, and one project after another has been proposed for connecting the Caspian with the outer seas. The latest is Engineer Lyzhin's project for a canal across the isthmus with 10½ feet minimum depth and 137 feet minimum width. The plans include 35 locks, the altitude to be crossed being 150 feet above the Don and almost twice as much above the Volga level. It is not fully clear how and from what sources and at what cost these high-level locks will be filled with water.

In applying for his concession Engineer Lyzhin asks the Russian Government to guarantee the interest on the \$41,200,000 capital necessary. It is stated that 4,734,000 tons of merchandise will annually pass through the canal and pay \$2,708,900. The working expenses have not been made sufficiently clear.

From the viewpoint of critics it is not apparent what the Russian Government can gain through the enterprise. If it must guarantee a profit, the point is made that it might better construct the canal itself. Another suggestion is that the Azov and Caspian Seas could be connected via Manych, where no such high ground is met, where no locks would be required, and where the soft ground could easily be excavated. The distance, however, is much longer, and the cost would be considerable, although the Manych Canal water, running continuously from the Azov to the Caspian, would help to raise the level of the latter, which is nearly a hundred feet below that of the Black Sea.

ROUMANIA.

[From American Minister John B. Jackson, Bucharest.]

Railway Works and Municipal Improvements.

With the beginning of the fiscal year it is announced that work is to commence at once on improving the railway freight yards, station, and docks at Galatz, on constructing a dry dock at Sulina, and on completing the railway from Piatra-Neamtz to Schela-Bistritza on the left bank of the River Bistritza.

The Roumanian Parliament has authorized several cities to contract loans for the execution of local improvements of various kinds and the construction of public buildings, and invitations to submit bids to supply sanitary fittings, etc., are continually being published. While the quantity called for in each case is relatively small, the aggregate is considerable.

INDIA.

[From Consul Stuart K. Lupton, Karachi.]

New Hotel in Karachi.

One of the first evidences of the growth of this city which may be expected as a result of the prospected Trans-Persian Railway is the statement that Khan Bahadur Nusserwanji R. Mehta is to construct a new hotel in Karachi at the estimated cost of 5 lakhs of rupees (\$162,200). Plans have been drawn up by an architect in Bombay, but no further information is at present available.

[From the Calcutta Englishman.]

Prize Design for the Floating Bridge at Calcutta.

The expert committee appointed by the port commissioners of Calcutta have awarded the prize of \$15,000 offered for the best design to the German firm, Maschinenfabrik Augsburg Nürnberg A. G., and have recommended the acceptance of their tender. It seems likely that the port commissioners will act on the advice of the committee, which is presided over by their chief engineer, although under the conditions of the competition they are not bound to place the contract with the prize-winning firm. The tenders ranged from \$2,000,000 to \$3,000,000 (there being 17 designs and tenders from 12 competitors, British, German, and American), and that of the German firm is \$2,675,000.

According to the successful design the bridge will be of nickel-steel and will be built in three spans, giving 200 feet of riverway in the center and 500 feet of riverway on each side. The shore spans will be supported on solid ornamental abutments, and there will be two groups of pontoons at each side of the opening span in the center. The bridge will open on the Scherzer rolling bascule system, the arms being raised like those of the Tower Bridge. They will be worked by electric motors, so that only a few minutes will be occupied in opening and closing them. The bridge will be 60 feet wide, with a 12-foot footpath on both sides and with room for a carriage way on each side of the double tramway track in the center.

CHINA.

[Correspondence from Hankow in the Manchester Guardian; supplementing report in Daily Consular and Trade Reports for Apr. 8.]

The Reconstruction of Hankow.

The plan for reconstructing Hankow native city, which was almost entirely destroyed by fire toward the end of last year, shows the town-planning scheme which has received official sanction. The whole town is represented as laid out with perfect geometrical regularity, with the main streets at right angles to each other and other streets crossing them diagonally. The plan is arranged according to the points of the compass, main streets running north and south or east and west. It ignores all the buildings left standing—of which there are not a few—and a fairly good road built some few years ago. All building plots are square and equal, except those which are half size and triangular, where the diagonal streets cut the others. It is not decided when work on the scheme will be begun. The idea seems to be that a foreign loan will be obtained. In the meantime the work of rebuilding is being started in several places just on the old lines.

WEST AFRICA.

French Proposal for Railway Construction.

It is announced that a bill has been introduced into the French Chamber of Deputies to authorize a loan of about \$30,000,000 for various railway and harbor improvements in French West Africa. This includes \$2,000,000 for Dakar and Conakry harbors and surveying operations in connection with the extension of the Ivory Coast Railway, \$5,000,000 for completing the Thies-Kayes Railway, \$3,000,000 for a line from Bamako to Bougouni, \$5,000,000 for extension of the Guinee Railway from Kanka toward Beyla, \$8,500,000 for extension of the Ivory Coast Railway from Bonake in the direction of Comoe, with a branch from Dimbokro toward Daloa, and \$6,500,000 for the extension of the Dahomey line from Save through Parakou in the direction of Djougou, and of the Grand-Popo line in the direction of Lokossa. The construction of a line from Porto-Novo to Cotonou is included.

PERU.

[From Consul General Wm. H. Robertson, Callao.]

Disastrous Fire at Mollendo, and Possible Substitution of Port by Natarani.

The port of Mollendo experienced on April 2 a serious conflagration, which destroyed the post office, the State telegraph office, the newspaper office of El Puerto, two hotels, many shops and residences, and other important buildings, the estimated loss being about \$500,000. The customhouse and the American consular agency were not injured.

The question of rebuilding Mollendo has given rise to the serious consideration again of making Matarani the leading port of southern Peru. Owing to the tide, conditions of the current, and the contour of the coast, vessels often have much difficulty in loading and unloading at Mollendo. The Bay of Natarani is 8½ miles to the north, is a much better harbor in every way, and, as a terminus of the Southern Railway, would shorten the run to Arequipa by nearly one hour even for freight trains, thus favorably affecting also all of the Bolivian trade via Peru.

The Peruvian Corporation has had a concession from the Government since 1910 to submit plans for a port in the Bay of Natarani and to build a railway to unite this port with that of Mollendo by tapping the present line from the latter port to Arequipa. The corporation has been actively operating in the meantime under the terms of this concession.

BRAZIL.**Proposed New Harbor.**

A bill to authorize the construction of a new harbor in Brazil for naval purposes, at a cost of \$20,000,000, is reported to be at present before the government, and the Bay of Ilha Grande has been suggested as the most suitable spot. The proposal includes erection of docks and buildings, but the provision of defense and similar work would involve an additional expenditure of \$10,000,000.

CANADA.

[From Consul Felix S. S. Johnson, Kingston.]

Proposed Powers for Ontario Hydroelectric Commission.

A bill has been introduced in the Provincial Legislature of Ontario conferring on the hydroelectric commission the following powers, among others:

To take over existing power-transmission lines and to improve water powers, by assisting municipalities and others in the storage of water, making of sluices, etc.; to regulate the installation of electrical equipment and of wires in all buildings, including private houses; to control absolutely light and power rates charged by municipalities whether these municipalities take power from the commission or not; to direct the disposal of surpluses earned by municipal power plants supplied by the commission; to order all wires under its jurisdiction to be laid underground in cities and towns; with the cooperation of the Dominion Railway Commission, to order to be laid underground all wires in streets where the municipalities construct tunnels or conduits to carry such wires.

Consul Horace Lee Washington learns that the supply of second-hand La Plata bags at Liverpool, which was limited at the end of April and consequently selling at 5 cents each, was expected to be abundant in June, with a prospective price of 4½ cents.

SHIPPING COMPANIES' RESULTS.

[From the London Times.]

The recently issued annual report of the Royal Mail Steam Packet Co. for 1911 shows that the trading profit, after providing for depreciation of the fleet, was \$1,417,178, against \$860,509 in 1910. After providing for debenture interest and depreciation of plant and premises and adding \$194,660 to reserve and a like amount to insurance fund, there was a balance of \$418,996 available for dividend, against \$340,845 a year ago. The amount carried forward was \$54,008, in contrast to \$19,656 in 1910.

The results of the operations of other navigation companies appears in the following statement, in which the net profits have been calculated after deduction of all expenses, including fleet depreciation and debenture interest. In the columns headed "To special appropriations, reserves, etc.," all allocations of a nonrecurring nature are included, as well as depreciation of plant and premises, where separately stated, and the regular or irregular contributions to reserves.

Companies.	Net profits.		To special appropriations, reserves, etc.	
	1911	1910	1911	1910
African.....	\$292,550	\$267,361		
British and African.....	181,394	192,650	\$24,333	\$36,490
Cairn Line.....	375,665	10,088	280,076	
Cunard.....	1,313,736	1,476,228	715,353	827,305
Elder Dempster.....	890,808	930,154	632,645	396,084
Elder Line.....	173,895	185,933	88,982	9,733
France, Fenwick.....	172,761	146,769	58,368	48,066
Gulf Line.....	117	59,376		
Imperial Direct.....	* 380,789	* 218,807		
King Line.....	90,366	24,542	48,139	22,483
Leyland (Frederick).....	639,063	* 28,951		
Mercantile.....	281,342	187,146	152,020	107,063
Moor Line.....	161,539	91,349		
National.....	* 20,610	* 51,020		
Neptune.....	80,531	118,855		

* For eight months.

* Loss.

The tabulated figures may usefully be supplemented by a few explanations. As the cause of its diminished profits the Cunard Co. adduces disappointing third-class business owing to diminished emigration to America, and higher working expenses owing to the operation of a larger fleet with higher labor costs, and special expenditure in connection with the dock labor trouble. As to the Imperial Direct Line, formerly the Imperial Direct West India Mail Service, the impossibility of continuing the fast direct service to Jamaica without a substantial Government subsidy led to the laying up of the company's fleet. The mail steamers have now been sold and replaced by vessels of a different type, which are all profitably employed, and last year's debit balance includes the loss incurred on the sale. The Cairn Line's profits were affected by exceptional transactions in both years. In 1910 heavy expenditure incurred in inaugurating a new passenger business and losses due to an accident to one of the company's ships both swamped nearly the whole of the company's profits even after a suspense account had been opened. During the past year the sale of two vessels to the Cunard Co. resulted in a large profit, and the special appropriations include the extinction of the suspense account.

SHOEMAKING IN CHINA.

[From Consul John Fowler, Chefoo.]

Requests are made for lists of big shoe factories in China, which can not be furnished, for shoe manufacturing among the Chinese is in a most primitive state. Chinese in the ports are now wearing foreign clothing more and more; and it is possible that in time shoe factories which make foreign shoes may be established in China. At present, however, the Chinese use their own materials in manufacturing their shoes.

FOREIGN TARIFFS.**BULGARIA.**

[Reported by American Minister John B. Jackson, Bucharest.]

Admission of Edible Cottonseed Oil.

The Bulgarian Government has removed the prohibition previously in force against the importation of edible cottonseed oil. Under the old law such oil had to be denatured before its admission into the country would be permitted. On May 4, 1912, sanitary regulations for the admission of the edible cottonseed oil were published, with provision for taking effect at once.

CHINA.

[From Consul John Fowler, Chefoo.]

Grain Restriction in Chefoo.

In March, 1912, the head of the Bureau of Foreign Affairs in Chefoo published an order of which the following is a translation:

After this port was taken by the troops of the Republic soldiers assembled here in clouds. This has made necessary the consumption of an immense amount of grain. The soil of Chefoo and vicinity is not fertile, and last year's crop was an unusually poor one. So the exportation of grain must be prohibited, and it has been decided to place an embargo upon three kinds—corn, millet, and rice. As regards other grain, the regulation is the same as before. It is feared that wicked merchants may secretly export grain, and therefore it is necessary strictly to forbid all, both Chinese and foreigners, in order that there may be food for the soldiers and the people.

DUTCH EAST INDIES.

[From Consul B. S. Rairden, Batavia, Java.]

Exportation of Rice.

The prohibition of the exportation of rice from the Dutch East Indies, reported in 1911, was removed in January, 1912.

NICARAGUA.**Change in Basis of Payment of Duty.**

The Bureau of Manufactures has been informed by Clifford D. Ham, Collector General of Customs of Nicaragua, of a change in the basis of the payment of customs duties, which is equivalent to a considerable increase in the customs duties on imports into the country. For the payment of customs duties, which are expressed in the tariff in terms of United States gold, the Nicaraguan Government has accepted the paper currency of the country at the rate of 650 pesos paper, equal \$100 gold. The present change, in effect on April 9, is such that henceforth the Nicaraguan paper currency will be accepted in the payment of the customs duties only on the basis of 800 pesos paper, equal \$100 gold. The actual market exchange value of Nicaraguan paper currency has varied greatly from time to time, but it has uniformly remained lower than that for which it has been accepted for the payment of customs.

This tariff change affects all importations or exportations made at the ports of Corinto, San Juan del Sur, El Castillo, and San Juan del Norte. No change has been made in the silver tariff of 1902, which is still in effect in the Atlantic coast ports of Bluefields (El Bluff), Las Perlas, and Cabo Gracias a Dios.

It is provided that when the new money, based on gold, comes into use, which will be July 1, 1912, or as soon thereafter as the new gold and silver coins are minted, the tariff rates will be expressed in terms of the new money at an equivalent figure.

PERU.

[From Consul General W. Henry Robertson, Callao.]

Certificates with American Lard.

A decree of March 20, 1912, specifies that the certificates of inspection accompanying American lard upon importation into Peru may be legalized either by Peruvian consuls in the United States or by United States consuls in Peru, at the option of those interested. [See item on "Analysis of lard" in Daily Consular and Trade Reports, Mar. 9, 1912.]

Concession to Peruvian Steamship Co.

A decree published in the Boletín de Aduanas for March 9, 1912, extends to the Peruvian Steamship Co. certain privileges in the entry of foreign cargo reaching Callao by its vessels. In the terms of the decree permission is given for all cargo brought to the port by the vessels of the company to be landed at a special customs warehouse for customs inspection. It is provided that those interested may ask for the dispatch of their goods immediately or at any time within 30 days after the packages have entered that warehouse. Before the end of that time the packages will not be placed in regular customs storage.

ROUMANIA.

[Reported by American Minister John B. Jackson, Bucharest.]

Extension of Conventional Tariff to American Products.

A Roumanian law has been promulgated extending to imports from the United States the rates of the conventional tariff. For several years past there has been discrimination against American products in Roumania, and the passage of the present law marks the success of the continued efforts on the part of the United States to secure the application of the rates of the conventional tariff to American imports.

TURPENTINE INDUSTRY IN INDIA.

[From the official Indian Trade Journal, Calcutta.]

The financial results of the turpentine industry in the United Provinces of India are stated by the Forest Administration to be very encouraging. The profit for last year was \$28,000 as compared with \$13,000 for the previous year. The excellent results are due to the phenomenal rise in price, turpentine having reached \$1.07 per gallon in March, 1911, at Calcutta, and rosin at \$2.31 per maund of 82½ pounds, delivered at Cawnpore. The sale of the entire output of rosin for the year ended March 31, 1912, is assured at good prices, one lot of 25,000 gallons of turpentine being sold at 81 cents per gallon, delivered at Kathgodam. The same purchaser is to take the whole outturn of turpentine up to March 31, 1914, at rates based on current London prices for best American oil. Arrangements are being made to considerably extend this industry. All the chir forests of the division have been brought under revised tapping scheme on a 15-year rotation whereby from next year onward 250,000 trees will be tapped every year. In the Almora and Naini Tal district protected forests, a commencement has also been made with about 35,000 trees which are now under tapping. This operation will be extended in these forests, the possibilities of which are enormous.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8807. Agencies for Germany.**—A commission agent in Germany, who was connected with the American consular service in that country for a number of years, writes to the Bureau of Manufactures that he would like to get in touch with American firms producing goods suitable for that country, with a view to securing agencies for the same.
- No. 8808. Locks, safes, and refrigerators.**—An American consul in a Mediterranean country reports that a business firm in his district desires to be placed in communication with American dealers in locks, safes, and refrigerators. Goods which may be retailed at reasonable prices are desired. Correspondence may be in English.
- No. 8809. China and earthen ware.**—A resident of an American consular district in a European country informs the consulate that he would like to get in touch with manufacturers in the United States of china and earthen ware in general, with a view to acting as agent for the American firm. Correspondence may be in English.
- No. 8810. Marine supplies.**—The American minister at Bucharest, Roumania, reports that bids have been invited, to be submitted on various dates between May 15 and June 15, under the usual conditions of guarantee, etc., for all kinds of marine supplies in sufficient quantities to satisfy the requirements of the Roumanian Navy during the fiscal year 1912-13. Information in detail in regard to this matter can be obtained upon application to the office of the Commandant of the Navy at Galatz.
- No. 8811. Paper-bag factory.**—A company has been organized in a foreign country to erect a factory for the manufacture of paper bags from imported paper. The proposed capital investment of the company is about \$50,000. Because of the amount to be saved in duty by importing the raw paper, the lower cost of suitable labor for manufacturing, and the saving of commissions through buying direct from the mills, the company expects to be able to produce bags at a considerably lower cost than they can be imported. An American consul has forwarded a prospectus of the new company. It will be seen from this that about \$15,000 worth of paper-bag machinery is to be purchased, and it might be well for American manufacturers of this class of machinery to communicate with the secretary, whose name appears in the prospectus.
- No. 8812. Steel rails and other accessories.**—The American consulate general at Bangkok, Siam, has forwarded copies of specifications and drawings for tenders for 12,400 tons of steel rails and 1,355 tons of permanent way accessories for the Siamese Railways. Tenders will be opened July 15 and 17, respectively. The papers referred to above can be obtained by interested firms upon application to the Bureau of Manufactures.
- No. 8813. Mineral, lubricating, and cylinder oils.**—An American consul in the United Kingdom reports that he has received a communication from a business firm in his district in which it states that it will be glad to be put in touch with producers in the United States of mineral, lubricating, and cylinder oils. This firm states it has just opened a house in Egypt, and the oils are required for shipment to that country. Payment would be made by the firm in the United Kingdom.
- No. 8814. Paraffin.**—A business firm in a European country has informed an American consular officer that it desires to import American paraffin. References will be furnished. Correspondence should be in French or Italian.
- No. 8815. Designs for monument.**—The American consulate at Kingston, Ontario, Canada, reports that the Public Works Department invites designs for a monument, including pedestal, to cost about \$35,000, to be erected at Ottawa to the late King Edward VII. Designs must be in the form of sketch models in plaster, made at a uniform scale of 1½ inches to the foot; they should be sent to Mr. Eric Brown, Director of the National Art Gallery, Ottawa, Canada, by October 1. Communications should be directed to the Secretary of the Public Works Department.

DAILY CONSULAR AND TRADE REPORTS

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FOREIGN LUMBER PRODUCTION AND IMPORTATION.

GREECE.

[From Consul A. B. Cooke, Patras.]

The consular district of Patras furnishes little domestic lumber of a merchantable grade. The only domestic sources are a few forests of valonia oak, the lumber from which is too full of knots and gnarls to be worked successfully, and some areas of mountain pine of an inferior quality. In consequence, practically all the lumber consumed upon this market has to be imported.

The chief uses of lumber here are for beams and girders of buildings—there are no frame buildings erected—for currant boxes, and for the manufacture of furniture (by hand).

The principal kinds of wood imported are fir, white pine, yellow (pitch) pine, beech, oak, and walnut. The countries of origin of these imports are Austria, Sweden, Turkey, and the United States. Practically all of the fir comes from Austria via Trieste or Russian Black Sea ports, with transshipment. Some oak, pine, and walnut comes from America, but the total imports of these woods from all countries are small, since they are used only in making furniture, which industry is in a primitive state here as yet.

Prices, Duty, and Imports.

The lumber is imported in boards of varying thickness, width, and length, or in small beams.

The average prices of lumber c. i. f. Patras (exclusive of customs dues and octroi tax) are: Fir, \$12 to \$14 per cubic meter (cubic meter = 35.314 cubic feet), according to form; pitch pine, \$20 to \$24 per cubic meter; beech, planed \$18, undressed \$14; oak, \$14 to \$60.

The customs duty on these woods is: Fir, \$2.62 to \$4.48 per cubic meter, according to form; beech, about \$0.92 per 1,000 pounds; oak, \$5.88 per cubic meter. To these charges must be added a municipal tax of 40 to 80 cents per cubic meter, according to kind of wood.

Customs records show the total amount of lumber of all kinds imported through the port of Patras during 1911 to have been 12,577

cubic meters. This represents perhaps rather more than half of the lumber imported directly into this district through all its ports of entry. The lumber trade is reported by importers to be steadily growing. Inquiries have several times been made at this consulate during the past year with regard to American yellow (pitch) pine and oak.

SIAM.

[From Vice Consul General Carl C. Hansen, Bangkok.]

The main product of Siam's extensive forests at present is teak, the exports of which for the fiscal year ended March 31, 1911, amounted to 89,165.17 tons, valued at \$2,820,914, against 76,090 tons, valued at \$2,580,771, for the previous year. Teak shipments during 1911 consisted of 61,407.24 tons of squares, 7,484.24 tons of planks, 272.33 tons of shingles, 1,036.35 tons of log and butt ends, 17,351.27 tons of scantlings, and 1,613.74 tons of unenumerated teak.

The distribution of teak to foreign countries for the year under review was as follows:

Countries.	Tons.	Value.	Countries.	Tons.	Value.
United States.....	90.00	\$4,773	Belgium.....	100.19	\$4,357
United Kingdom.....	11,590.06	652,596	Italy.....	1,772.52	79,811
Singapore.....	1,873.75	67,147	South Africa.....	150.36	8,218
Hongkong.....	9,404.74	212,269	Dutch possessions.....	100.00	2,590
France.....	3,094.67	210,027	Cochin China.....	241.56	11,259
Germany.....	1,183.86	58,301	India.....	42,487.15	911,098
Japan.....	2,853.92	101,059	China.....	1,873.42	53,542
Denmark.....	805.56	44,152	All other countries.....	3,201.72	199,215
Austria-Hungary.....	800.16	44,324			
Ceylon.....	6,880.93	156,176	Total.....	89,165.17	2,820,914

Siamese Woods Other Than Teak.

While teak is the most important product of Siam's forests, and the teak regions are mainly confined to northern Siam, lower Siam and the Malay Peninsula contain many valuable forests of wood other than teak. Among these are rosewood, which in considerable quantities is shipped to Hongkong, Singapore, and the United Kingdom; boxwood, which is valued in Japan for carving; agilla and sapanwood, which are shipped to Hongkong and Singapore.

Foreign firms have lately obtained concessions to work timber areas in lower Siam, and the products of these forests are now beginning to supply the local needs for cheap wood, which is yearly purchased from Singapore in considerable quantities, the imports for 1911 being valued at \$319,431.

The exports of wood of all kinds except teak during 1911 were valued at \$213,217, against \$168,615 for the previous fiscal year, the main points of destination being the United Kingdom, Hongkong, and Singapore.

GERMANY.

[From Consul Herman L. Spahr, Breslau.]

Certain foreign woods are in constant demand in Silesia because they do not grow in Germany and for the specific purposes of the manufacturing interests can not be replaced by domestic woods. They are hickory, rosewood, mahogany, cedar, *lignum-vitæ*, teak-

wood, ebony, and American walnut, whitewood, and pine. American oak and ash are also sought.

Hickory is indispensable in the carriage factories, especially for wheels that must be very elastic and able to stand heavy strains. There is no domestic wood for wheelwrighting comparable to hickory in strength and elasticity. The prices obtained are limited by the price of finished wheels that come from America. The inland waterways enable local industries to get their wood cheap enough to meet this competition.

Walnut is used in large quantities by the furniture and carriage factories. Oak furniture is made almost exclusively of American wood, since German oak is hard to obtain for this purpose. Walnut and oak are also sought by the piano factories of the Liegnitz district. Whitewood is used as a blind veneer; German poplar does not make a satisfactory substitute. Pitch, red, and Carolina pine are in demand. Cedar for lead pencils and cigar boxes is hard to get from America. Veneers are made of rosewood, mahogany, American or Caucasian walnut, American poplar, etc.

AZORES.

[From Consul Edward A. Creevey, St. Michaels.]

Trade conditions in the Azores are peculiar. The islands are small, and at best only a limited business can be done. As to lumber or timber, all of which is from the United States, the islands are supplied principally from cargoes of wrecked and damaged vessels. At least for the past four years this has prevailed, and during the first two weeks of January more than 150,000 feet of timber were discharged from a large steamer that encountered hurricane weather on its way from Mississippi to Europe and put into St. Michaels dismayed and with part of the deck load gone. To effect temporary repairs and permit the vessel to proceed the deck load was discharged and was sold at the low price of 2 cents per foot.

AMERICAN TIMBER AND LUMBER INDUSTRY.

A preliminary statement of the general results of the Thirteenth Census of establishments engaged in the manufacture of lumber and timber products includes statistics of: (1) Logging camps, turning out logs, bolts, and such timber products as cross-ties, poles, posts, mine timbers, and spars, wheel, handle, and excelsior stock; (2) merchant sawmills and planing mills connected therewith, producing rough or dressed lumber, shingles, lath, veneer stock, and cooperage stock; (3) planing mills, not only dressing lumber, but making such articles as builders' finish, sash, doors, blinds, panels, wood mantels, bracket shelves, stair work, screens, moldings, and interior wood-work; and (4) wooden packing-box factories, wherein are made not only wooden boxes or cases, but, among other articles of a like nature, box shooks, berry, cheese, fig, and raisin boxes, egg cases and crates. It does not include small neighborhood mills, sawing exclusively or chiefly for local consumption. The figures are subject to revision.

The general summary shows increases in all the items at the census of 1909 as compared with that for 1904. The number of establishments increased 62 per cent; capital invested, 60 per cent; gross value of products, 31 per cent; cost of materials, 41 per cent; value

added by manufacture, 24 per cent; average number of wage earners employed during the year, 30 per cent; amount paid for wages, 30 per cent; number of salaried officials and clerks, 37 per cent; amount paid in salaries, 49 per cent; miscellaneous expenses, 21 per cent; primary horsepower, 51 per cent; and salaries and wages, 32 per cent.

A comparative summary follows, giving the general statistics for the industry:

	1909	1904
Number of establishments.....	40,671	25,159
Capital.....	\$1,176,675,000	\$733,913,000
Cost of materials used.....	\$508,118,000	\$360,403,000
Salaries and wages.....	\$366,167,000	\$277,652,000
Salaries.....	\$47,428,000	\$31,746,000
Wages.....	\$318,739,000	\$245,906,000
Miscellaneous expenses.....	\$121,338,000	\$100,144,000
Value of products.....	\$1,156,129,000	\$884,512,000
Value added by manufacture (products less cost of materials).....	\$648,011,000	\$524,109,000
Employees:		
Number of salaried officials and clerks.....	41,145	30,042
Average number of wage earners employed during the year.....	695,019	532,629
Primary horsepower.....	2,840,082	1,886,959

American Veneer Industry—Wood Imports and Exports.

The reported total quantity of timber of all species consumed during 1910 as veneer material was 477,479 thousand feet, log scale, which was an increase of 9.5 per cent over 1909, 24.8 per cent over 1908, and 37 per cent over 1907. The development of the industry of veneer manufacture has been rapid. In fact, since 1905, when statistics concerning this subject were first separately collected by the Bureau of the Census, no branch of manufacture which utilizes logs or bolts as raw material has made such substantial progress, the total quantity of timber used in 1910 being 163.6 per cent larger than in 1905.

Expansion in the industry during recent years has been due in large part to the development of a distinctly different class of uses of veneers from those for which this stock was originally made. For many years veneers were cut exclusively from the cabinet woods, chiefly imported, and used as a covering for cheaper woods. In fact, the common use of the word "veneer" includes only material thus used as a covering for some other material. In the trade, however, the term is applied to woods cut very thin and not intended for covering, and it is such "veneers" that are increasing most rapidly. In 1910 more than 40 species of timber, mostly domestic, were used as veneer material, and the major part of the output was consumed in the manufacture of baskets, packing boxes, berry crates, barrels, furniture, laminated lumber, etc.

Red gum was drawn upon as veneer material in 1910 to a greater extent than any other species, contributing about one-third of the total quantity consumed in the industry during that year. Yellow pine and maple followed in the order named and contributed 8.4 per cent and 8.3 per cent of the total consumption; respectively. Eight other kinds of wood, all of domestic growth, contributed more than 10,000,000 feet each to the total, and ranked in the following order: Yellow poplar, cottonwood, white oak, birch, tupelo, elm, basswood, and beech. Of the high-priced imported woods, mahogany was used

in largest quantity, followed by Spanish cedar, Circassian walnut, and English oak, in the order named, with relatively unimportant quantities of other species.

Official statistics show that American imports of wood of all kinds and manufactures thereof were valued in the last three calendar years as follows: 1909, \$50,293,509; 1910, \$54,489,711; 1911, \$51,843,283; while the exports for the corresponding 12 months were worth \$72,313,280, \$85,789,033, and \$95,980,868.

SOUTH AFRICAN LUMBER IMPORTS.

[From Consul Ernest A. Wakefield, Port Elizabeth, Cape of Good Hope.]

Considerable quantities of timber are imported at Port Elizabeth for the diamond mines in the Kimberly district and the gold mines on the Rand, chiefly for use in underground tunnels and shafts. Some years ago this trade was largely in the hands of American exporters, but now, owing to higher prices of the American product, Baltic deals from Norway and Sweden are used more extensively than American timber. Canadian deals are also used to a considerable extent, both for building construction and in the mines.

Baltic deals are largely used for roofs and floor timbers in building construction. Canadian deals are as cheap, but are handicapped by being obtainable only in 12, 14, and 16 foot lengths. Baltic deals are delivered in full cargo lots by Swedish or Norwegian steamships, while most of the American and Canadian lumber is shipped in comparatively small lots. Baltic flooring and ceiling boards are also imported. A few full-cargo shipments of Oregon pine, with occasionally a little redwood, come from the Pacific coast by sailing vessels, but this trade is much less important than it was a few years ago.

American woods are used for the following purposes: White pine for flooring, shelving, interior finish for dwellings, furniture, cabinet-making, and business blocks; hickory for wagon wheels and implement handles; southern pine for flooring, bed-spring frames, and indoor finishing; oak and ash for furniture and indoor finishing. The importations of these woods, except for mining purposes, are not heavy for several reasons. A large part of the wood manufactures, including furniture and door frames, are imported. Nearly all houses of any importance are built of brick and faced with cement, requiring the use of only a minimum amount of wood. More attention is also being given to local woods, with the result that some of those previously considered of little value are now found to be available for wagon and furniture construction. In this district there is little serviceable forest growth, and the last-named consideration will never be of great importance. The establishment of a depot at one of the principal South African seaports should prove a decided aid in increasing the sales of American timber here.

[The complete report, of which the above is an abstract, giving prices of various classes of lumber, names of dealers, and other information may be obtained from the Bureau of Manufactures.]

The Manchester (England) municipal gas committee proposes to borrow \$1,000,000, of which \$300,000 will be spent on mains and service and \$700,000 on meters, stoves, and "gas fires."

FRUIT BOXES AND SHOOKS.

[From Consul Robert Frazer, jr., Valencia, Spain.]

No American Boxes Used.

There has been practically no importation of boxes, baskets, or shooks from the United States for Valencia fruit packers, although correspondence has frequently been carried on with several of the largest producers of these articles in the United States. The principal obstacle is the price, as, notwithstanding the increasing scarcity of packing materials of domestic growth, the cost of American containers placed c. i. f. Valencia appears to be still slightly above the current values on this market. The packages in which the fruit of this region are put up have acquired certain traditional forms and sizes known the world over, to which imported baskets and shooks would have to conform.

Some trade might be established here in fancy baskets of vencers, etc., for packing mandarins, plums, apricots, grapes, etc. All of these are put up in a variety of expensive fancy packages for export. For the home market, Valencia fruits and vegetables are either transported loose in railway freight cars of two or three stories, with floors and walls covered with rice straw, or in special wicker baskets, made of split cane woven on osier framework. These baskets cost 14 to 22 cents wholesale and hold 56 to 112 pounds of fruit.

[Details of the sizes of orange and onion cases used in Valencia, and a list of dealers handling these boxes in Valencia, may be obtained from the Bureau of Manufactures. Reports on fruit packing at Valencia appeared in Daily Consular and Trade Reports for May 18 and Nov. 23, 1911, and Jan. 23, 1912.]

[From Consul Homer Brett, Maskat, Oman, Arabia.]

American Shooks Supplanted by Norwegian Wood.

American shooks, which were at one time used here for boxes in which Maskat dates are packed for export, have been replaced by shooks from Norway, which are said to be 30 per cent cheaper than the American product. Three sizes of boxes are used, the 12-pound being 12 by 7½ by 3½ inches; the 60-pound, 18 by 10 by 9 inches; and the cases, 26½ by 12 by 11½ inches. The wood used is about ¾-inch, except the ends, which are of ⅝-inch stuff. Practically all of these shooks are supplied to the packers here by the New York fruit importers.

[From Consul Theodore C. Hamm, Durango, Mexico.]

No Market in Durango.

There is no market in the State of Durango for imported box shooks or cut-up lumber, as there are about 6,500,000 acres of pine and oak timber land in this State. While these timber resources have been little worked up to the present, recent railroad construction into some of the best timber land will make its exploitation easy and economical. At present there is one box factory, run in conjunction with a sawmill about 60 miles from this city, which supplies the local demand for boxes. In this city there is nearing completion a large combined sawmill, planing mill, and box factory, which will have a capacity of 200,000 feet of lumber a day and will use the timber made available by the Llano Grande branch railroad.

[A list of firms near Durango having box factories, forwarded by Consul Hamm, and firms at San Luis Potosi using quantities of imported shooks and lumber, forwarded by Consul Wilbert L. Bonney, may be obtained from the Bureau of Manufactures.]

[From Consul Alexander V. Dye, Nogales, Sonora, Mexico.]

Tomatoes Shipped From Sinaloa.

Tomatoes are exported from Los Mochis, Sinaloa, in lug boxes and in 4 and 6 basket crates. The tomatoes are wrapped in tissue paper and shipped green in refrigerator cars, but are not iced. It takes about two weeks for a car to reach Philadelphia, and the freight is about \$350 a car. [The names of leading growers may be obtained from the Bureau of Manufactures.]

AUSTRALIAN TIMBER INDUSTRY.

[From Dalgety's Review, Sydney.]

The export of timber from Queensland is not very large, though it is gradually and steadily increasing. There has been during the last 12 months great activity in all the timber-getting centers, and heavy supplies have been made to the local merchants and building contractors.

While there are still importations from the northern rivers, and occasionally from over-sea ports, the stores of timber in the State are so vast and varied that in the ordinary development of the timber industries these importations must cease and Queensland become a large exporter.

There are huge areas of forest land, estimated at 40,000,000 acres, as yet uninspected and unreserved, which will some time be thrown open to the timber getter's axe and the trader's activities. Masses of pine trees, ironwood, gray gum, silky oak, and other valuable timber may be found in many parts of the State, which will be reached as the railroads are extended and the advance of trade and enterprise makes it advantageous to handle them. There are now reserved about 3,000,000 or 4,000,000 acres, and the operations of the timber merchants cover a considerable area, but this is small in comparison with the extent of forest land. The number of sawmills erected near the areas being cleared is increasing, and the annual output is now not far short of 1,500,000 superficial feet, valued at about £750,000 (\$3,650,000).

Not only the abundance but the immense variety of useful woods that the State possesses make the possibilities of a large future export trade very promising. Queensland pines and beeches are unexcelled for butter boxes, house and carriage building, and general joinery work, and the ironbark, black butt, stringy bark, and tallow wood are unequalled for railway sleepers, road paving, and for every purpose where hard and enduring timbers are needed. Such choice woods as silky oak, pencil cedar, rosewood, tulip wood, and red oak, besides many others that are abundant, are unrivaled for furniture making, cabinetwork, and fine veneers. The ample supply of timbers for all purposes, now only fringed by the getters, must make the State one of the great supply centers for the Australian Commonwealth and ultimately for more distant markets. The great waste that has been indulged in here, as in all young countries, is being checked.

Banana and other fruit crates and ordinary packing cases are now often made of woods that would probably sell for £10 (\$48) per ton if there was better supervision of the timber trade and greater care taken in placing such timber on the market. The regulations by which the merchants can secure standing timber, embodying the principles of licenses and sales by tender or auction, and the payment of royalties, are working satisfactorily, and the revenue derived from this source is increasing, but it is evident that much might yet be done to develop the industry.

Bank merger.—It is stated from Toronto that consolidation has been effected of the Royal Bank, which has 200 branches, with 24 in the West Indies, and the Traders' Bank, which has 130 branches throughout Canada. This is the third large Canadian banking combination in 12 months.

FOREST CONSERVATION IN SCOTLAND.

[From Consul H. D. Van Sant, Dunfermline.]

Scotland contains a considerable number of well-preserved and imposing forests, cared for and protected for centuries; and compared with the wanton destruction of the majestic timber in the Eastern American States and the St. Lawrence district of eastern Ontario, the conservation of woodland on the large estates of Scotland is deserving of special notice and emulation. To this care under the early feudal system must be largely attributed the splendid condition of many of the forests of magnificent oak, spruce, hickory, elm, ash, hemlock, plane, larch, beech, laburnum, chestnut, willow, rowan, and the various wild and domestic trees of comparatively scanty growth.

In the Dunfermline district are several well-wooded tracts, one of them containing more than 5,000 acres, with many trees over 3 feet in diameter. In the north of Scotland is another forest, abounding in protected game and deer, nearly 10 miles in extent, while the country is dotted with the remains of medieval forests. Of the 850,000 acres of privately controlled Scottish forests much is but sparsely wooded, needing protection and reforestation if it is not soon to become entirely destroyed. It is said that 765,000 acres of this area is understocked and much of it going to waste through lack of scientific silviculture.

Forestry Schools and Officers.

The well-to-do classes and aristocracy are adopting improved methods in guarding their forest parks, and the authorities on forest culture in Scotland are awakening to the need of more protection to those portions of the dying woods that are without such vested ownership or care. The Department Committee on Forestry in Scotland has recommended the employment of one officer for every 4,000 acres, with a working foreman in charge of every 1,000 acres, the former at an annual salary of \$600, the latter at \$300, and house rent free. These officers are to be trained at a central station, the location for the head forestry school most favored being near Aberdeen. Four lecturers for general instructions on reforestation are to be employed, as at present, with three additional officers in charge of the central demonstration forest. It is proposed that a small number of scholarships be attached to the demonstration school with a training course of one to three years, each scholarship to be worth from \$250 to \$750 per year. No one will be eligible for these scholarships who has not completed a full course of higher study in forestry and taken a degree.

Along with other economic conditions the loss of population through emigration is said to be due in a measure to the almost total destruction of timber in parts of Scotland where coal is not easily accessible. To reforest and preserve this land and to help hold and settle a permanent population, now largely depleted through constant emigration, is in part the object of this beginning of a more extended forest conservation.

Vice Consul General James L. A. Burrell states that the Portuguese census taken on December 31, 1911, gives the population of Lisbon as 436,434, an increase of 80,000 over 1900, and of Oporto 194,064, an increase of 26,000.

FRENCH WHEAT PRICES.

[From Consul Louis Goldschmidt, Nantes.]

The steady advance of wheat prices since September, 1911, is attributed to (1) an insufficient stock left over from the crop of 1910; (2) a short crop in 1911; (3) the customs duty of 7 francs per 100 kilos (37 cents a bushel) on imported wheat; and (4) bad crops in Russia and countries along the Danube, uncertain expectations in India, late and poor crops in Argentina, and delay in deliveries due to railway strikes. This increase is further explained by the *Chambre Syndicale des Grains* (Board of Trade for Grains): "In 1911 the production of wheat in France reached 111,000,000 hectoliters (314,-989,400 bushels). According to customhouse statistics, 3,710,000 hectoliters (10,528,027 bushels) of foreign wheat were imported or supplied by the previous year's stock. In round figures, this gives a total of 115,000,000 hectoliters; the demand being for 123,000,000 hectoliters, theoretically it was necessary to import 7,500,000 hectoliters (21,283,070 bushels) to make up the difference, less, however, any reserves which might have been kept in stock by the farmers."

At present (Apr. 26) the prices of foreign wheat per 100 kilos (220.46 pounds) are: Australian, 22 francs (\$4.25); Walla Walla, 21.25 to 21.50 francs (\$4.10 to \$4.15); Plate, 21 francs (\$4.05). Some time ago Walla Walla wheat was bought, but this grain is brought by sailing vessels which take two or three months to make the voyage. Two cargoes were purchased at 21.25 francs per 100 kilos, such cargoes being due in French ports in May and June; but as this wheat has been paid for "against documents," or 60 days before delivery, two months' interest at 5 per cent must be taken into account.

The outlook is uncertain, but a prominent member of the chamber referred to expresses this opinion: "Farmers will be occupied until May with spring sowing, and consequently they will make no offer, the more so as they have but a small quantity of wheat in stock. The price will then continue to rise until the arrival of foreign wheats (May-June); but as the quantity of such wheats bought is not known, it is very likely that French merchants will continue to purchase from hand to mouth."

Newspaper dispatches dated May 8 stated that the French Government has decided not to suspend the tariff of 7 francs (approximately \$1.40) per 100 kilos (220.46 pounds), but it may prolong from two to three months the period in which wheat may be imported free on condition that an equivalent weight of flour is exported from France by the importer before the expiration of that period. This will temporarily relieve the market.

The National Millers' Association calls attention to the situation in a special report showing that the present stock of wheat is only 44,000,000 kilos (97,003,400 pounds), whereas it should be several hundred million kilos.

With warm weather and a good crop, however, the situation will ameliorate. In the meantime bread has risen in price and heavy wheat orders have been placed in Argentina, Canada, and Australia.

Consul M. K. Moorhead, of Rangoon, states that the total expenditure for education in Burma during the fiscal year 1910-11 was \$1,414,921 for a total population of 12,000,000.

OCEAN SHIPPING LINES.

[From Consul General George E. Anderson, Hongkong, China.]

India-Pacific Freight Competition.

The extraordinary activity in shipping between India and China and Japan, particularly between Calcutta and Hongkong, indicated several months ago in the announcement of a new service between Calcutta and Japan via Hongkong by the Nippon Yusen Kaisha over the protest of other members of the Pacific Shipping Conference, is further exemplified in notable shipping changes.

The Apar Line, which has been sold to the British India Steamship Co., includes some of the largest ships plying between Japan and India and, with the Indo-China Steam Navigation Co., maintains a fortnightly service between Japanese ports and Calcutta via Hongkong, constituting practically the only passenger service between Hongkong and Calcutta direct. The British India Steamship Co. has also established a line between Rangoon and Hongkong and Japan, affording a fortnightly service for passengers and freight.

The matter is of considerable practical importance to the United States, since one of the chief objects of these respective services is the transportation of gunnies and bone meal from India to Hongkong for transshipment to the United States. The freight rate on goods from Calcutta to Hongkong is largely the controlling factor in the trade, as most commodities from India for the United States passing by way of the Pacific, including the commodities named, are handled on so small a margin that any substantial increase in the freight rate would result in an immediate reduction of the trade. This competition in the Calcutta-Hongkong service is now keen and is having a marked effect on the movement of Indian commodities to the United States.

French Line to Far East.

The new French mail contract recently made to succeed one in effect for a number of years provides for a fortnightly service of 15-knot ships instead of the 14-knot speed formerly required and for larger ships on the Marseille-Saigon-Hongkong-Yokohama run. There is also established an additional monthly service from Marseille to Haiphong and probably Hongkong to alternate with the same sort of a service with a second French company, the service of all lines therefore furnishing Indo-China with a monthly French mail to Europe.

[From Consul Isaac A. Manning, Barranquilla, Colombia.]

New Steamship Service for Colombian Ports.

From May 5 the United Fruit steamers from New York added Puerto Colombia to their itinerary. The plan called for first steamer to touch at Cartagena on May 4, at Puerto Colombia on the 5th, Santa Marta on the 6th and 7th, and returning touch at Cartagena on the 8th, thence to Colon, Jamaica, and New York. This will materially increase the steamship facilities between Cartagena and Puerto Colombia, the port for Barranquilla, and the United States.

[From the Near East.]

New Service in the Mediterranean.

The announcement is made that the Austrian Lloyd has decided to inaugurate on June 1 next a new itinerary which is to shorten considerably the journey between Beirut in Syria, Egypt, and Europe, and vice versa. This itinerary will be maintained

till the end of October. The steamers on the Syrian service will leave Beirut on Monday evening for Port Said and Alexandria, where their arrival coincides with the sailings of the boats on the express line running between Alexandria, Brindisi, and Trieste. The arrival at Brindisi and Trieste is timed to coincide with the departures of the trains. Moreover, the hitherto triweekly Tauern express between Trieste and Paris will become daily as from May 1, 1912. The journey from Beirut to Naples or Rome will be six days via Brindisi, and one week to Paris via Trieste.

RUSSIAN WOOL PRODUCTION.

[From Consul John H. Grout, Odessa.]

From various reports it appears that during the past winter, in all parts of European Russia where fine wool sheep are raised, the flocks were successfully brought through. The majority of these flocks were in this consular district. Fodder was sufficient, the winter moderate, and the animals were in good health at beginning of the winter. In those Provinces east of the Urals, however, whence a great many of the flocks formerly located here were moved, the situation appears different, lack of food and blizzards causing much damage. In this consular district the wool appears to be of good soft staple and is expected to give an ample clip, estimated from a maximum of unwashed wool at 20 pounds down to 5 pounds per head, but giving a fair average. This applies to fine wool.

The clip of coarse wool is expected to be considerably less, and in places where the fodder had to be used sparingly, the clip may be as low as 3 pounds for some individual specimens. The following statement for several years past still applies:

The rent of land is becoming too high for sheep farming on the old lines, so that flocks are being steadily reduced. In some cases the decrease is as much as 30 per cent, or even more. Only in the district of Ismail, Bessarabia, and Rylsk, in the Province of Kursk, are there increases, in addition to a few places outside this consular district, but the rate of increase reported is not sufficiently large to be reassuring.

NOVA SCOTIA NOTES.

[From Consul General James W. Ragsdale, Halifax, May 2.]

The coal output for the first three months of the year increased 150,000 tons, about equally divided between Glace Bay and Sydney mines districts. If markets hold good, the increase for the year over 1911 will amount to 500,000 tons.

Labor prospects in all lines seem bright; besides the promised building briskness, unskilled labor should be in fair demand, in consequence of the contemplated expenditure of some \$100,000 by the corporation of Halifax for water-service extension and sewer works.

Apple shipments from Halifax for the 1911-12 season eclipse all previous records, the total by all steamship companies being 1,243,443 barrels, against 240,700 barrels for 1910-11 and about 800,000 barrels for 1909-10. Shipments for the past season to various ports were: London, 659,969; Liverpool, 242,725; Glasgow, 147,863; Hamburg, 118,115; Bristol, 28,933; Manchester, 21,090; Newfoundland, 17,017; West Indies, 3,831; South Africa, 3,125; and Habana, 775 barrels. In addition there were shipped from Annapolis 17,547, from Yarmouth 5,250, western shipments 176,150, and to local markets 150,000 barrels, making a grand total from Nova Scotia of 1,592,300 barrels.

COMMERCIAL PROGRESS AMONG MOROS.

[From Consul General George E. Anderson, Hongkong.]

The general prosperity of the Philippine Islands at a time when all other portions of the Far East are experiencing more or less industrial and commercial depression is the one notable trade feature at the beginning of the year 1912.

The most significant development, in some respects, is that to be noted in the Moro country in the Province of Mindanao, of which Zamboanga is the capital. Until within the past few years most of this Province was more or less controlled by savages—tribes of wild men known as the strongest, bravest, and most warlike of the Filipino peoples, the last to be brought within the influence of American administration. Eighty-five per cent of the population is still savage or semicivilized, without the least idea of popular government.

The policy of the American administrators in Mindanao, however, has been gradually to show the people the advantages of peace and order, to teach them to cultivate their land and to husband their resources, and to advance as far and as rapidly along the paths of civilization as may be possible for themselves, and particularly to advance the next generation.

Government Encouragement—Exports of the Province.

To do this the provincial authorities have established agricultural experiment stations, agricultural schools, model farms, and the like; have taught the people trades and aided their industries; have introduced improved farming machines and implements, where possible, and improved varieties of plants and seeds; and have given encouragement and assistance to the industrial, agricultural, and commercial advancement of the people in every way possible.

Dissatisfied with the manner in which these people were being exploited by local dealers, the Government has instituted a system of selling foreign supplies to the people at cost and has at the same time encouraged them to produce products for sale by providing a ready market for their surplus at prices corresponding with those received for such goods in other portions of the Philippines and elsewhere. The annual report of the governor of Mindanao indicates in a striking manner the result of this policy. The exports of the Province, reported by the governor, have been as follows:

Towns.	1909	1910	1911
Baganga.....	\$33,289	\$16,833	\$31,284
Caraga.....	8,565	18,184	34,836
Cateel.....	14,790	12,640	21,362
Cotabato.....	23,424	69,446	36,321
Dapitan.....	34,557	47,859	39,183
Davao.....	295,538	453,266	448,086
Iligan.....	55,016	41,156	32,482
Jolo.....	317,337	468,675	477,728
Mati.....	24,267	35,957	30,300
Zamboanga.....	260,910	541,340	942,895
Total.....	1,067,693	1,705,356	2,094,477

Agricultural Possibilities.

The development indicated and the administrative work responsible for much of the advance are in some respects typical of the entire situation in the Philippines. There are many districts in the islands capable of even more rapid development than the Moro country. Of

this region itself much may be said. Hemp, coconuts, rice, and tobacco are the principal lowland products; but there are unlimited possibilities at various altitudes for coffee, cotton, sisal, rubber, fruits, forage, and cereal plants. All tropical and semitropical fruits do especially well in this Province. Some of those actually grown are the mango, banana, pineapple, coconut, orange, lemon, mangosteen, citron, cacao, pomelo, papaya, lime, fig, breadfruit, litchi, guava, and durian. All garden vegetables are successfully cultivated.

The agricultural experiment-station work for tropical districts in the Philippines is being centered at San Ramon farm near Zamboanga, where work is done by provincial prisoners under the direction of an expert loaned by the Department of Agriculture in Washington. With this farm as a nucleus, with an agricultural school for native boys in each district, and with a system of tribal farming under foreign supervision, provision is made for teaching the coming generation how to farm efficiently and profitably, not only "pacifying" the country, but starting the people to take advantage of their wonderfully rich natural resources. The use of foreign goods, as a matter of course, is greatly on the increase. Naturally, trade with the rest of the Philippines and with the outside world has been the inevitable result, and the development of these Provinces in aid of the native inhabitant is reflected and has resulted in Philippine prosperity.

ARGENTINE TRADE NOTES.

[From Consul General R. M. Bartleman, Buenos Aires.]

Stock-Raising Industry.

In a recent publication issued by the Ministry of Agriculture it is stated that according to the latest census there are 29,000,000 head of cattle in Argentina and that this figure has not varied much during the last four years. Taking the increase of stock at 25 per cent in normal circumstances, the expansion of Argentine herds would be 7,000,000 head per annum; but from this must be deducted losses caused by disease, droughts, and other causes, which in the last few years have occasioned an excessive mortality. It is estimated that last year 4,000,000 head of cattle were slaughtered for domestic consumption and 1,000,000 for markets abroad, and it is reckoned that the increase of the Republic's herds amounts at present to only 3.45 per cent. The ministry deems this fact worthy of especial attention. The suggestion is made that a prudent limitation to the slaughtering of cows be established.

Cheaper Passages from Europe—New Steamships.

The Argentine consul general in Hamburg announces that the German companies have decided to reduce their third-class passage to Buenos Aires to 100 marks (\$23.80).

The Royal Mail Steam Packet Co. now has under construction 5 large twin-screw steamers for a fortnightly intermediate direct passenger service between Liverpool, Rio de Janeiro, and Buenos Aires. The first will arrive here early in June, and on the return trip to Liverpool will make the voyage in 22 days.

Imported Maize for Seed.

Maize (corn) seed was imported from the United States last year, and such excellent results were obtained that further experiments will be made during the coming season.

BRITISH PATENT STATISTICS.

[From Consul General John L. Griffiths, London.]

British official records show that 29,353 applications for patents were filed during 1911, as compared with 30,388 in 1910, 30,603 in 1909, 28,598 in 1908, 28,915 in 1907, and 30,030 in 1906.

There were 2,670 applications for patents received from residents of the United States, 841 from British colonies and possessions, 6,152 from European countries, of which 3,304 were from Germany, 30 from Asia, 21 from Africa, 59 from Argentina, Brazil, Central America, and Mexico; 1 from the Philippine Islands, and 19,579 from the United Kingdom.

Five applications were filed for the revocation of patents worked exclusively or mainly outside of the United Kingdom. In two of the cases revocation of the patent was decreed, in one the application was dismissed, in one the patent expired after the institution of the proceedings, and the remaining case is pending.

Designs and Trade-Marks—Trend of Invention.

While there was a falling off of over 1,000 in the number of applications for patents, there was an increase of more than 10,000 in the applications for designs which were made in 1911 as compared with 1910, the totals for the two years being 43,057 and 32,745 respectively. The designs registered in 1911 aggregated 41,581 as against 32,212 in 1910.

In 1911, 9,743 applications for trade-marks were filed and 4,868 registered, as against 10,623 filed and 5,722 registered in 1910.

The Comptroller General thus describes the trend of invention in 1911 in his report:

The ever-increasing importance of means of locomotion to the community in general is demonstrated by the prominence this subject takes under an analysis of the whole field of inventive activity. The internal-combustion engine, an important factor in the science of locomotion, is greatly in evidence, particularly in connection with the revolving cylinder type and the so-called "valveless" engine, in which poppet valves are dispensed with. Wheels for vehicles are a still more prolific source of invention. Motor vehicles and motor cycles maintain their claim to attention, variable-speed gearing, clutches, and engine-starting devices being especially noteworthy. Aeronautics declined in comparison with the previous year, but the number of applications is still sufficiently great to make the subject one of the outstanding features of the year's inventions. It is interesting to note that efforts are being made to utilize aeroplanes as auxiliaries in naval warfare by contriving means for launching them from the decks of battleships. In view of the recent dispute in the taxicab industry, it is significant that many applications were received dealing with the registration of "extras."

Industrial Inventions.

In the textile industry the most noticeable feature of interest is the remarkable number of inventions designed to obviate the objectionable habit known as "kissing the shuttle"; that is, threading the weft by drawing or sucking it through the shuttle eye by the breath. To avoid this, the shuttle is so constructed that it can be threaded by hand, or special suction or other devices are provided for threading existing shuttles. Efforts are still being directed toward abating dust and improving ventilation in the carding room of spinning mills. Chemical and fermentation processes for extracting fiber from flax, ramie, and other plants, both for spinning and paper making, are also worthy of remark.

In the chemical industry considerable activity has been shown in connection with the synthetic production of india rubber and of ammonia, the catalytic reduction of unsaturated fats, oils, and the like, and the production of dyes of the anthracene series.

Increasing attention is being given to the utilization of the gyroscope, more particularly in its application as a substitute for the magnetic compass, and in its use as an anti-skidding device for vehicles and as a stabilizing means for flying machines.

FAR EASTERN TRADE NOTES.

[From the London and China Telegraph.]

New bank.—A project is on foot among the business men of Fusan, Korea (Chosen), for establishing a commercial bank with \$250,000 capital.

Coconut growing.—The Malanao Coconut Co. (of Manila), capital \$100,000, formed to develop a large plantation on the island of Pandanan, plans to plant a grove of at least 100,000 trees.

Canton-Hankow line.—A Canton correspondent who has returned from a visit to the North River says the Canton-Hankow Railway construction is being pressed forward, and on March 19 was to be opened for traffic to the mouth of the Lienchow River, which will give a run of over 70 miles from Canton.

New coins.—The new Chinese Republic dollars will, it is understood, bear two lions and the Chinese characters for "one dollar" on one side, and on the reverse the characters "current money," "Chinese Republic," with a wreath of flowers. The Peking Daily News says that a sample coin has been approved by Yuan Shih-kai, and minting will begin at once.

Chinese Pullmans.—The first of the two sleeping cars to be used in the service between Shanghai and Nanking was available for the first time on the train that left Shanghai at midnight on April 11. The car, designed by E. J. Dunston, is well built, roomy, and neatly fitted. Its full length is 68 feet, and its width 10 feet 7 inches. The bunks are 7 feet long.

Amusement enterprises.—The revolution has brought about a renaissance in art and amusements. The number of places of amusement in Shanghai have increased to an astonishing extent within the past few months. A big theater has just been built at Shanghai, and a number of modern Chinese dramas are to be staged, for the production of which 80 Chinese actors have been engaged at Peking and Tientsin.

Siberian freight rate.—Representatives of the Japanese and Russian railways have been sitting in conference at Vladivostok with a view to arranging for a through traffic rate for exports of Japanese silks to Europe. Hitherto silk has been shipped via the Suez Canal, and has taken about 45 days in transport. By the proposed new arrangement it will go via Siberia to Berlin in 13 days at the through rate of 5.52 rubles per pood (\$7.88 per 100 pounds).

Artillery order.—Arnhold, Karberg & Co., representing an Austrian syndicate, has signed a \$2,200,000 loan with the Chinese Board of Finance. The loan bears interest at 6 per cent, and is issued at 95. The contract has been indorsed by the army and navy boards, secured on the Peking octroi and redeemable at par five years hence. In return for this accommodation the Chinese Government engages itself to order from the Skoda works artillery of the full value of the loan.

Colonization profits.—A Seoul telegram states that the net profits realized by the Oriental Colonization Co. during the current business term is \$272,000, and that when the sum brought over from last account, amounting to \$225,000, and the Japanese Government grant of \$150,000 is added, the total profits will reach \$647,000. The authorities of the Government General of Korea concerned are now making investigations relating to the distribution of dividend. [The formation of this company was announced by American Ambassador O'Brien in Daily Consular and Trade Reports for Mar. 22, 1909. The Bureau of Manufactures has in its files for public inspection the translated articles of organization of the company.]

Coal-mine consolidation.—The agreement for amalgamation of the Kaiping and Lanchow coal-mining companies, signed in January last, has been ratified by the Chinese Government and the British minister. The combination will be called the Kai-lin Mining Administration. The Kaiping company receives 60 per cent of the profits and the Lanchow company 40 per cent up to a total of \$1,500,000, above which there will be an equal division. On the expiration of 10 years the Lanchow company will receive the right of purchasing the whole of the Kaiping properties at a price to be arranged.

[From London Financial Times.]

Peking syndicate steamer.—There has just been launched at Port Glasgow, Scotland, the first steamer of the coal-carrying fleet of the Peking syndicate. The vessel is 275 feet in length, 44 feet in breadth, and 21 feet 6 inches in depth, and is to carry 3,000 tons dead weight. It has several novel features in arrangement and equipment, including Temperley transporters for loading and discharging. The vessel was named *Sir Richard Awdry*, this being the name of the chairman of the syndicate.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8816. Novelties and specialties.**—The Bureau of Manufactures is in receipt of a communication from a foreign legation stating an engineer in a European country, whose ability and references are said to be good, wishes to take up the agency of some American novelties and specialties, and would therefore like to get in touch with manufacturers of novelties in machinery, as well as of products of the electro-technical and chemical-technical lines, or of some other similar articles which might find a ready sale in the country in question. He is not, however, looking for heavy machinery. Correspondence should be directed to the legation which furnished the information.
- No. 8817. Revolving electric bridges.**—The American consul at Montevideo, Uruguay, reports that tenders are being called for for furnishing and placing four revolving electric bridges, weighing 3,300 pounds and 2,493 feet of way, as per conditions on view at the office of Traffic and Conservation of the Port Works Council of Montevideo. Tenders will be received until June 20, 1912.
- No. 8818. Railway equipment.**—The American minister at Bucharest, Roumania, reports that the "Direction des Chemins de Fer Roumains," Bucharest, would like to receive communications from interested American manufacturers (no middlemen), to whom it would be prepared to send invitations to submit bids for equipment from time to time as required. Manufacturers should send references and catalogues in making their request to receive such invitations, and should state the railways, American and foreign, for which they have already supplied equipment.
- No. 8819. Agencies for American goods.**—An American consular officer in a Latin American country reports that a resident of his district will be in the United States for the next few months and will be pleased to make agency connections with American manufacturers of sawmill and woodworking machinery, pumps, pipe, fencing wire, cement, building materials (principally steel), electric plants, small turbines for water power, canning machinery, ice machinery, and other articles that find a sale in a new country where the principal industries are logging, sawmilling, and cattle raising. He would also be pleased to meet persons interested in the purchase of timber forests and cattle ranches in a South American country.
- No. 8820. Apples.**—A report from an American consulate in the United Kingdom states that one or two large wholesale fruit dealers in that country desire to get into communication with either the apple growers or packers in the United States with a view to making direct purchases. Correspondence regarding this matter should be mailed direct to the consulate in question.
- No. 8821. Petroleum pipe line.**—Supplementing previous reports on the subject, the American minister at Bucharest, Roumania, writes that the law for the construction of a pipe line from Baicoi to Constantza was enacted by Parliament recently. The preliminary study is expected to take about three months, after which bids for material will be invited. It is probable that a commission will be sent to the United States in connection with this study. The "Director des Chemins de Fer Roumains," Bucharest, would like to receive communications from American manufacturers, together with references and catalogues showing the character of the material which they are prepared to furnish. Subsequently invitations to submit bids will be sent to such manufacturers direct, but only to the actual producer and not to any middleman or intermediary agent.
- No. 8822. Portable iron houses.**—An American manufacturing firm writes to the Bureau of Manufactures that one of its correspondents in a West African country is in the market for portable iron houses. American manufacturers of such articles should communicate direct with the foreign inquirer.
- No. 8823. Shooks and packing cases.**—An American consul in England reports that inquiries have been received at the consulate for the names of firms in the United States exporting shoos and packing cases, with a view to importing the same.

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FRENCH COMMERCE DURING LAST YEAR.

[By Consul General Frank H. Mason, Paris.]

The year 1911 was one of industrial and commercial prosperity, not only in France but all the world over, and if the disturbing political factors of the last half of the year only seemed to affect the financial situation, it is because industrial and commercial prosperity or depression depend upon deeper lying and more durable causes than those created by diplomatic and political influences. Increased railway returns, expansion of foreign trade, and augmented revenue from indirect taxation showed that the year 1911 was one of activity and progress, maintaining and extending the industrial and commercial revival which 1909 began and 1910 confirmed.

The adverse effects of the bad cereal and wine crops of 1910 continued to be felt in a marked manner during the early part of the year, and the unsatisfactory harvests which again ensued from an over-dry summer did nothing to alleviate the situation, which was moreover aggravated by an extensive outbreak of the foot-and-mouth disease among domestic animals. France, which under ordinary circumstances is not only self-supporting but exports agricultural products, was once more compelled to obtain supplies from other countries. The value of the imports of foodstuffs for the year increased over \$120,625,000, while the exports decreased some \$31,845,000, which means a large loss to the agricultural interests.

The effects of this deficiency manifested themselves in a decrease in the deposits with the savings banks, the increase in the cost of living, and unfavorable foreign exchanges caused by a disturbance in the balance of trade.

Official Discount Rates on the Money Market.

The money market during the first part of 1911 was free from any unusual features. The year opened with an official discount rate of 3 per cent in Paris, 4½ per cent in London, and 5 per cent in Berlin, but, as is usual, the monetary conditions became gradually easier as the year advanced, and after two reductions of one-half per cent—

one in January and the other in February—the Bank of England rate fell to 3 per cent on March 9; while the Reichsbank put its rate to 4 per cent on February 18. Nothing of any moment disturbed the financial horizon until the beginning of July when the relative tranquillity of the first six months of the year gradually gave way to a period of disquietude and uncertainty. The general industrial and commercial situation was but little influenced, but the money market was soon affected.

The banks, as a precautionary measure and in view of a loss of deposits, found it necessary to reduce considerably their loans to the stock exchange and called in their temporary loans from abroad, especially from Germany. The withdrawal of French deposits from Germany caused considerable comment at the time. It is difficult to estimate the amount of these withdrawals, but it is considered that they did not exceed 320,000,000 francs (\$61,760,000) and the embarrassment caused to the German money market was apparently less than was thought, especially as the Germans were able to a great extent to counteract these withdrawals by borrowing considerably from New York.

The Bank of France declined to pay gold except in a limited quantity against its notes, signs of hoarding became evident, and as conclusive evidence of the tension existing, the Bank of France on September 21 raised its rate of 3 per cent, at which figure it had stood since January, 1908, to $3\frac{1}{2}$ per cent. The monetary tension continued, although loans for stock exchange operations were considerably curtailed and foreign credits withdrawn.

Bank Rates of France and Other Countries—Gold Supply.

As previously stated, last year witnessed the only change in the official bank rate since January, 1908, whereas the rate was changed four times in London and three times in Berlin. The discount rate of the Bank of France has undergone but 11 changes since 1898, with a maximum of $4\frac{1}{2}$ and a minimum of 2 per cent, while in England it has varied 73 times in the same period, with a maximum of 7 per cent and a minimum of $2\frac{1}{2}$ per cent; in Germany it has changed 57 times, with a maximum of $7\frac{1}{2}$ per cent and a minimum of 3 per cent; in Austria 22 times, ranging from $3\frac{1}{2}$ to 6 per cent; in Switzerland 55 times, ranging from 3 to 6 per cent; in Belgium 37 times, ranging from 3 to 6 per cent; and in the Netherlands 30 times, ranging from $2\frac{1}{2}$ to 6 per cent.

The stock of gold at the Bank of France at the end of last year was valued at \$615,670,000, a decrease of \$14,089,000 compared with the same period in 1910, which decrease is ascribed to the unfavorable foreign exchanges ruling during the first months of the year.

Bank Notes in Circulation—Crossed Checks.

The average circulation of bank notes for 1911 was 5,243,375,000 francs (franc=19.3 cents), and the maximum 5,574,198,000 francs. The legal maximum amount of notes which the Bank of France was permitted to have in circulation at any one time was 5,800,000,000 francs, but owing to the exigencies of the situation this limit was closely approached, and Parliament passed a law raising the legal maximum to 6,800,000,000 francs. The issue privilege of the bank, which was approaching termination, has been renewed until 1920. The bank, in consideration of this renewal, has agreed to increase to 200,000,000 francs its permanent and noninterest-bearing advance to

the State Treasury and has undertaken to make certain extensions and improvements in its relations with the public.

The practice of crossing checks, which has existed in France for some time, received official recognition by a special law passed for the purpose at the end of December and based upon that existing in England. This law will not, of course, cause any change in the status of the check, but simply provides an additional safeguard which can be used when desired, rendering it necessary that a crossed check should be presented for payment by a banker. It remains to be seen whether this change will assist in extending the use of the check in this country, which up to the present has been relatively restricted. However, before the full benefit of the check system with its currency-saving effect can be felt, the bankers' clearing house in Paris, which is now only operating in a comparatively limited manner, will have to be considerably developed.

Operations on the Paris Bourse.

The Paris Bourse was normally active during 1911, but there was a diminution in the amount of new securities listed compared with the previous year. During the first part of the year new issues followed in rapid succession, and the output bid fair to rival 1910, with its enormous total of about 6,000,000,000 francs (\$1,158,000,000) of new securities. The total amount of new issues on the official and outside markets was about 4,800,000,000 francs (value as per first quotation). The so-called "gilt-edge" securities giving a fixed revenue, such as the governmental, municipal, and railway bonds, again showed decreased quotations. Owing probably to the increased cost of living, the public has turned to securities which, if not perhaps offering the same guaranty, give a more liberal return on the capital invested.

The 3 per cent French rente closed the year at 94.50, as against 97 at the end of 1910, an appreciable decline on a security of this character, and similar reductions occurred in the quotation of the bonds of the railroads, Ville de Paris, and the Credit Foncier. The unsatisfactory harvests of the past two years have resulted in decreased deposits in the savings banks, and the French rente was accordingly deprived to a certain extent of the support resulting from the investment of these funds in the Government security, which partially explains the drop in the quotation of the French rente.

French industrial and kindred stocks in a large majority of cases showed increased prices at the end of last year compared with the same period the previous year, and although these stocks no doubt felt the reactionary effects during the latter half of the year, owing to the foreign political situation, the soundness of the industrial and commercial situation was able to resist the depressing influence.

The general tendency of the stocks of the principal credit establishments and banks was upward, although the securities of some of the principal institutions were at a lower figure at the end of last year than in the previous year. This irregularity was probably due to the different issue operations with which each particular bank happened to be associated.

French Railway Stocks and Bonds—Suez Canal Shares.

The traffic returns of the French railway companies were satisfactory during last year. Except the Orleans, the stocks of the three most important companies—the Nord, Paris-Lyon-Méditerranée, and the Est—showed increased quotations at the close of the year com-

pared with the same period the previous year, while the Orleans, the Midi, and the Ouest-Etat showed decreased quotations. However, the figures for the first three named companies were not up to those of 1909.

The bonds of the railway companies all show lower quotations for the year, and the intention of the Government to arrange shortly for a large issue of 4 per cent bonds at par by its own line, the Ouest-Etat, is a sufficient indication of the inducements it is necessary to offer in order to get the public to subscribe to fixed interest-bearing securities. The net revenue from the 4 per cent bond would be only a little over $3\frac{1}{2}$ per cent after deducting taxes, and therefore gives practically the same security as the 3 per cent French rente, which, however, is not subject to taxation. The average quotation of the 3 per cent bonds of the following railways at the end of last year was: The Nord, 424 francs; Lyon, 415 francs; Est, 419 francs; and the Ouest, 424 francs.

The Suez Canal traffic returns constitute a good barometer of the general activity throughout the world. In spite of the decrease in the passage rate inaugurated at the beginning of January, 1911, the year showed considerable increase in the total tonnage dues, and the shares of the company stood at 5,925 francs at the end of December, against 5,525 francs at the same period in 1910.

American Securities at Paris.

One of the most interesting features of the year was the introduction of three important American stocks upon the official market of the Paris Bourse, viz, the Atchison, Topeka & Santa Fe Railway Co. (common), the American Telephone & Telegraph Co., and the Philadelphia Co. Although several American stocks, such as the Utah Copper, United States Rubber first preferred, Virginia-Carolina common, etc., have been introduced upon the "Coulisse," or outside market, no American stock had ever been accepted on the official market, and the listing of the three above-mentioned securities, in the face of considerable technical and other difficulties, may be considered an event of some significance. The Atchison, Topeka & Santa Fe Railway Co. is the first and, up to the present, the only American railway stock quoted on the Paris Bourse. There has been a fairly active market for these three stocks, but the continuous downward tendency of the New York market since their introduction here has not of course encouraged transactions in Paris.

Two issues of American railway bonds were made here during 1911 and admitted to the official market, viz, \$40,000,000 Central Pacific Railway 4 per cent bonds and \$7,000,000 St. Louis & San Francisco Railroad 4 per cent bonds.

Rates of Exchange.

The high level of the sterling rate of exchange which existed throughout 1910 continued during 1911, especially for the first half of the year, during which the full effect of the necessity, owing to the previous bad harvests, of importing instead of exporting foodstuffs was felt. The average rate for the first three months was 25.29, or 7 centimes above the mint par of exchange, and 25.30 $\frac{1}{2}$ for April, May, and June. The lowest rate recorded during the first six months was 25.25 $\frac{1}{2}$, which is noteworthy when it is remembered that for years previous to 1910 the average sterling rate was continuously below the mint par of exchange of 25.22. During the second half of the year the monetary disturbance resulting in the withdrawal to a consider-

able extent of French foreign deposits and the increase in the discount rate of the Bank of France appreciably modified the rate for sterling. The highest rate of the year was 25.32½ and the lowest 25.14.

The exchange rate for the American dollar, which during 1910 increased from 5.17 francs in January to 5.20½ francs in December, opened the year with 5.20, at which level it remained until about August, when the same downward movement manifested itself as with the sterling exchange. The months of October and November witnessed the lowest average rate of the year, viz, 5.16½, increasing to 5.18½ for December. The highest figure for the year was 5.20½, and the lowest 5.16½.

Import and Export Trade of France.

The provisional statistics recently published, which as usual will be subject to revision before being embodied in the permanent record, show that the total foreign commerce of France in 1911 was valued by the customs authorities at \$2,766,219,592, of which \$1,575,008,731 represented imports and \$1,191,210,861 exports. Compared with 1910 the imports increased \$270,357,681 and exports \$32,104,006, and the aggregate foreign commerce of 1911 exceeded that of any previous year.

The total values of imported and exported merchandise, as classified in the French returns, show the following comparison between 1910 and 1911:

Classes.	Imports.		Exports.	
	1910	1911	1910	1911
Food products.....	\$244,501,471	\$384,037,576	\$150,741,492	\$139,971,320
Raw materials.....	800,199,809	895,322,947	347,194,069	370,907,910
Manufactures.....	259,949,770	295,048,208	566,174,957	586,165,873
Postal packages.....			94,996,337	94,165,858
Total.....	1,304,651,050	1,575,008,731	1,159,106,855	1,191,210,861

The total duties collected on imports in 1911 amounted to \$143,-889,220, an increase of \$36,616,928 over the previous year.

Distribution of Foreign Trade.

The values of imports into and the exports from France during 1910 and 1911, respectively, by countries, are shown in the following table:

Countries.	Imports from.		Exports to.	
	1910	1911	1910	1911
United States.....	\$108,816,295	\$170,445,634	\$81,762,713	\$76,542,835
Algeria.....	62,701,840	88,305,220	84,661,959	93,533,204
Argentina.....	55,859,990	70,420,875	30,862,244	33,179,981
Austria-Hungary.....	16,384,349	16,632,740	8,598,536	8,918,144
Belgium.....	90,864,400	102,869,193	185,823,631	197,343,079
Brazil.....	28,743,683	29,926,773	12,897,418	15,118,076
Germany.....	158,581,345	186,261,598	147,481,529	158,078,773
Italy.....	36,155,076	36,260,261	63,231,046	55,636,882
Russia.....	63,944,181	79,639,713	15,346,538	10,703,973
Spain.....	36,531,812	43,954,785	27,311,816	26,558,730
Switzerland.....	26,366,888	27,435,529	73,061,694	77,769,157
Turkey.....	18,147,597	19,334,161	13,730,935	15,856,108
United Kingdom.....	173,401,236	197,019,611	237,537,452	240,667,140
Other countries.....	428,152,358	506,502,638	176,799,194	181,304,779
Total.....	1,304,651,050	1,575,008,731	1,159,106,855	1,191,210,861

Thus the imports from every country given above increased, compared with 1910, and the exports to all countries except the United States, Italy, Russia, and Turkey show a more or less important growth over the preceding year. The apparent loss in exports to the four countries named was due almost exclusively to reduced shipments of food products.

Imports from United States.

From the foregoing table of totals it will be seen that according to French statistics the imports into France from the United States showed an increase of \$61,629,339 over 1910. The following table gives the provisional figures for the two years, with the various imports classified into groups according to the division of the French tariff:

Articles.	1910	1911	Articles.	1910	1911
Automobiles and parts....	\$218,862	\$483,465	Phosphates, crude.....	\$299,818	.....
Bran.....	143,785	29,143	Provisions:		
Cereals and flour.....	1,670,222	6,442,919	Fats.....	\$275,990	\$3,604,468
Chemicals.....	247,812	375,578	Meats.....	129,503	1,026,567
Coffee and cocoa.....	374,999	612,582	Rubber, and manufac-		
Copper, crude.....	14,294,545	16,333,011	tures of.....	2,841,732	5,526,362
Cotton, raw.....	57,227,202	93,326,308	Seeds and plants.....	84,148	.....
Feathers.....	216,353	380,403	Shells, pearl, etc.....	230,349	529,206
Fruits.....	430,390	391,404	Sponges.....	371,718	347,014
Hair, animal.....	71,410	.....	Tobacco, raw.....	2,950,005	3,050,944
Hides and skins.....	2,560,531	1,678,328	Whalebone, crude.....	280,815	204,580
Leather, manufactures of.	427,109	1,470,274	Wood and manufactures		
Machinery.....	8,959,060	10,222,824	of:		
Nickel, ingots.....	452,392	1,675,240	Common.....	2,937,663	4,527,587
Oil:			Exotic.....	247,426	452,199
Cottonseed.....	228,126	1,468,537	Furniture.....	248,365	307,256
Mineral and gasoline..	3,184,886	8,428,117	All other articles.....	5,366,172	5,927,030
Oil cake.....	673,377	1,052,815			
Pearls.....	671,640	571,473	Total.....	108,516,295	170,445,634

From the foregoing summary it will be seen that with the exception of seven or eight relatively unimportant articles, there was a more or less important increase in every class of imports from the United States. The increase of \$36,099,106 in the receipts of raw cotton, more than \$5,000,000 in mineral oils and gasoline, and more than \$2,000,000 in raw copper, attest the prosperity of French manufacturers, while the greatly enhanced imports of cereals, flour, provisions, and meats reflect the diminished production of certain food materials in this and other European countries upon which France has been accustomed to rely in order to supply casual deficiencies.

Shipments to the United States.

The provisional statistics of the total French exports to the United States, as shown in previous table, are so inaccurate that the items are omitted from this report. They are merely estimates made by a commission, which assumes a mean average value per kilo for each kind of merchandise, and obtains a theoretical result by multiplying this unit by the number of kilos of each kind of goods exported. Such a system breaks down completely when applied to works of art and other highly valuable and often unique articles which form an important part of French exports to the United States.

The only statistics which show with substantial accuracy the real values of French exports to the United States are those derived from the records of American consulates in France, at which are declared and certified the invoices which cover all shipments exceeding \$100

in value. They are imperfect only in that they do not include shipments below that limit, or the large quantities of clothing, ornaments, jewelry, furs, etc., which are bought here by American visitors and taken home as personal effects without consular invoice. The value of the articles as declared by shippers and certified at the 15 American consulates in France for shipment to the United States and possessions during last year was \$119,584,060 against \$121,895,566 for 1910. [A report on the export trade, by consular districts, was printed in the Daily Consular and Trade Reports for Feb. 20, 1912.]

French exports to the United States are largely manufactured goods, in which the element of skilled labor forms the principal item in the cost of production, whereas about 80 per cent of American exports to France are food products, raw cotton, copper, mineral oils, leaf tobacco, etc., which are either necessities of life or raw materials which are indispensable to French manufacturers.

As already stated, the year 1911 was a disastrous one for certain agricultural products, owing to the drought which did not seriously affect the earlier cereals. The area under cultivation, the output, and the imports of cereals compared with 1910 were as follows:

Products.	1910			1911		
	Acreage.	Production.	Imports.	Acreage.	Production.	Imports.
		<i>Bushels.</i>	<i>Tons.</i>		<i>Bushels.</i>	<i>Tons.</i>
Wheat.....	16, 113, 539	262, 890, 144	634, 895	15, 644, 665	304, 597, 579	2, 143, 420
Rye.....	4, 259, 935	44, 976, 677	63, 234	2, 874, 786	45, 907, 312	64, 840
Barley.....	1, 842, 447	36, 512, 609	120, 759	1, 912, 604	47, 320, 711	203, 006
Oats.....	9, 668, 321	190, 678, 314	381, 171	9, 983, 087	296, 150, 388	543, 634

The output of beet sugar last year was 515,000 metric tons, compared with 711,172 tons for 1910.

Shipping Statistics.

The returns of navigation show that there arrived in French ports during 1911 a total of 7,690 French vessels, of 7,138,170 tons register, and 20,493 ships, of 22,278,220 tons burden, under the flags of Great Britain, Germany, and other foreign nations. This was an increase of 487 vessels of 1,184,548 tons over the previous year.

The clearances included 6,946 French vessels, of 6,623,511 tons, and 13,860 foreign vessels, of 15,931,835 tons aggregate capacity, a decrease of 74 French vessels and 34 foreign vessels as compared with 1910, but an increase of 369,823, and 264,965 tons, respectively, in their tonnage, and illustrates forcibly the steady increase in size and tonnage of merchant craft since steam has so largely displaced sailing ships in international trade.

Cost of Living in Canada.

Consul Harry A. Conant quotes the following market prices as showing the high cost of living at Windsor, Ontario: Potatoes, \$1.60 per bushel (against 60 cents a year ago); butter, 35 cents; eggs, 23 cents; lard, 16 cents; bacon, 20 cents to 23 cents; round steak, 16 cents; sirloin steak, 20 cents; porter house, 25 cents; pork, loin chops, 20 cents; ham, 15 cents; cheese, 20 cents.

FOREIGN TARIFFS.**AUSTRALIA.****Trade Description for Condensed Skimmed Milk.**

By a regulation issued by the Governor General of the Commonwealth of Australia on February 28, 1912, a new paragraph is added to the provisional regulations under the commerce act, 1905 (see Tariff Series, No. 17B), providing as follows for the trade description of imported condensed skimmed milk:

In the case of condensed skimmed milk or condensed separated milk, the trade description shall include the words "Condensed skimmed milk, unfit for infants" or "Condensed separated milk, unfit for infants," printed in bold-faced sans serif type [i. e., gothic] of not less size than 12 points face measurement; the said words shall form the first words of the label; no other words shall be written on the same line or lines. Additionally, there shall be printed across the face of the whole of the label, in a diagonal line and in a transparent red color, the words "Skimmed milk" in bold-faced sans serif capital type of not less size than 48 points face measurement.

Under the old regulations a mere description of the character of the imported milk was considered a sufficient trade description.

BRITISH HONDURAS.

[From Consul W. L. Avery, Belize.]

Increase in Export Duty on Mahogany.

Beginning April 1, 1912, the export duty on mahogany and cedar was advanced from \$0.75 to \$1 per thousand feet.

Increased License Fee for Commercial Travelers.

On March 14, 1912, the Legislative Council of British Honduras increased the license fee payable by commercial travelers to \$50 from the date of issue up to and including the 31st day of December following. The former rate was \$10 per annum from the date of issue. There is a concession in the ordinance providing that if a license be issued after the 1st day of December in any year such license shall be in force for one calendar month from the day on which it is issued, so that if a commercial traveler should secure a license on December 30, for example, the license would be valid for the following 31 days.

CANADA.

[From Canada Gazette, Apr. 13, 1912.]

Standards for Edible Vegetable Oils.

Under the adulteration act the Canadian Government has established the standards for edible vegetable oil as follows: (1) Olive oil, sweet oil, is entirely a product of the olive tree; its specific gravity at 15.5° C. is not less than 0.914 nor more than 0.9196; its specific refractive index at 15.5° C. is not less than 1.47 nor more than 1.4718; its Maumene number lies between 42 and 52; its iodine absorption number (using the Hubl solution) lies between 77 per cent and 94 per cent; its saponification number (Koettstorfer number) lies between 185 and 195; it does not contain above 3.5 per cent of free fatty acids. (2) Cottonseed oil is the oil obtained from the seeds of cotton plants and subjected to refining processes; it is free from rancidity; its specific gravity at 15.5° C. is between 0.9216 and 0.93; its refractive

index (at 25° C.) is not less than 1.47 and not more than 1.4725; and its iodine number is not less than 104 and not more than 110 (Hubl solution).

Either of the above may be sold as salad oil, but when cottonseed oil is offered as salad oil, the fact that the article is cottonseed oil must be declared on the label. Mixtures of cottonseed oil with olive oil must be so declared on the label.

CHOSEN (KOREA).

[From a published Reuter dispatch.]

Abolition of Export Duties.

The Japanese Foreign Government has decided, in spite of the representations of the British and French Governments [see Daily Consular and Trade Reports of Apr. 23, 1912], to abolish the export duties leviable on all except the following articles, exported from Chosen (Korea), namely, wheat, soya bean, beans, sesame, oxen, cowhide, coal, and iron. On the above articles the 5 per cent ad valorem import and export duties will be maintained.

The argument of the Japanese Foreign Office for the removal of the duties is that the declaration of 1910 [see Foreign Tariff Notes No. 1, p. 13] was to be understood as meaning only that the maximum amount of the existing duties would not be raised, but that under the Korean customs the Korean Government had always had the right to decrease or abolish the duties, which right was tacitly reserved to the Japanese Government at the time of the annexation. The right was not mentioned in the declaration, as the Japanese Government did not foresee that the right could ever be contested, the Japanese Government being the assignees by the treaty of annexation of the rights and privileges of the Korean Government.

CUBA.

[From Gaceta Oficial, Cuba, Apr. 10, 1912.]

Special Reductions in Rates of Customs Duty.

The Cuban Government has granted exemptions from the surtax imposed in 1904 for a number of articles for use in the manufacture of pianos, at present dutiable under tariff No. 207. The articles included are specially prepared steel wire for pianos, from No. 12 to No. 22; specially prepared copper wire for pianos, from No. 1 to No. 27; keys for stretching piano strings; woods in sheets 1 centimeter thick, specially prepared for certain piano parts; apparatus and accessories, such as hammers, hammer catchers, and other small parts and pieces; maple wood specially prepared for bridges; piano keys of ivory and wood; bronzed cast-iron frames for fastening piano strings. Up to the present these articles have been dutiable under the general tariff at 52 per cent ad valorem, and under the United States preferential tariff at 36.4 per cent ad valorem; with the surtax removed in accordance with the present decree, the rates for the future are 40 per cent ad valorem under the general tariff and 28 per cent under the United States preferential tariff. These reduced rates are to be extended only to manufacturers of pianos, who shall

submit a sworn statement that the goods imported are to be used by them in the manufacture of pianos.

Special exemption from the surtax imposed in 1904 is also accorded for labeled tin containers, when imported by those engaged in the butter-making industry, for use as containers of butter. Such containers have been dutiable under tariff No. 56 at \$5.20 per 100 kilos, general rate, and at \$3.90 per 100 kilos, United States preferential rate. When imported as prescribed they will in the future be dutiable at \$4 under the general tariff and \$3 under the United States preferential.

DOMINICAN REPUBLIC.

[From Gaceta Oficial, Dominican Republic, Mar. 27, 1912.]

Changes in Consular Fees.

By a law of March 18, 1912, the tariff of consular fees in the Dominican Republic is slightly modified. The fee for the legalization of signatures and for certification is in the new law fixed at \$1, which is one-half the rate formerly in force. [A copy of the new tariff of consular fees, in Spanish, is on file in the Bureau of Manufactures.]

NORWAY.

[From Nachrichten für Handel, Industrie und Landwirtschaft, Mar. 8, 1912.]

Petition for Free Admission of Vegetables.

The association of hotel proprietors of Norway has petitioned the Government of the country to allow the free importation, or at least importation at greatly reduced rates of duty, of fresh vegetables during the months in which Norwegian vegetables are not to be obtained. The specific period of each year for which this exemption or reduction is sought is from November 1 to June 30.

SIERRA LEONE.

Revision of Duty on Spirits.

The Bureau of Manufactures is in receipt of a copy of a new ordinance revising the rates of customs duty on spirits imported into Sierra Leone, the documents having been transmitted by Consul W. J. Yerby.

UNION OF SOUTH AFRICA.

[From Commercial Intelligence, London, Apr. 8, 1912.]

Proposed Tariff Changes.

The South African Trade and Industries Commission, appointed to investigate industrial conditions and make suggestions for the furtherance of the industrial and commercial welfare of the Union, has submitted its report.

The commission appears to have been guided in the preparation of its report solely by the evidence obtained from witnesses and by the fiscal faith of its members, of whom a majority were protectionists. The result of their deliberations is, in the main, merely a collection of proposals in favor of higher import duties on specific articles, based on the proposals of the interested parties, supplemented by various recommendations in general terms for cheaper transport and for a more active policy on the part of the Government in the development of agriculture.

Among the proposals of the commission are recommendations that the rates of customs duty be increased on the following products:

Wheat, butter substitutes, chicory, confectionery, flour, macaroni, ham, bacon, mineral water, salt, and spirits; boots and shoes, crockery, tiles, leather manufactures, jewelry, and vehicles. The report does recommend reductions in the rates of duty on some articles, but these are of slight importance in comparison with the increases recommended.

URUGUAY.

[From Diario Oficial, Uruguay, Mar. 13, 1912.]

Proposed Tariff Revision.

The draft of a law has been laid before the Congress of Uruguay providing for the revision of the customs tariff, the bill in question containing a new schedule of duties for food products of all kinds. In this proposed law all the rates of duty are on a straight specific basis, instead of a percentage of a fixed valuation, as in the tariff at present in force. There are many other changes from the schedule which is now in effect, suggesting modifications in the customs classifications; for example, beverages are not contained in this draft, indicating that they may be included in a special separate schedule. This bill indicates a disposition to revise the tariff schedule by schedule.

It is proposed that the customs surtax of 5 per cent of the value of the goods shall not be collected in addition to the duties provided for in the schedule. The other surtaxes, amounting to about $3\frac{1}{2}$ per cent of the value, will be levied on the value of the goods as declared in the customs.

On a number of articles it is proposed to reduce the rates of duty below those of the present tariff, but on many of the other articles, allowing for the change from the present basis of collection of duty and the abolition of the 5 per cent surtax, the rates under the proposed law amount to about the same as the present.

[Document transmitted by Consul Frederic W. Goding, Montevideo.]

In another bill it is proposed to make marked reductions of duty on a considerable number of raw materials and to authorize the President to grant exemption from duty on machines for use in industry. In the same proposed law there is a provision for the increase of the duty on cottonseed oil by about 5 cents a kilo.

WIRELESS TELEGRAPHY IN CENTRAL AMERICA.

[Translation from Nicaragua paper by Consul James W. Johnson, Corinto, Apr. 13.]

The National Electric Signal Co., of Pittsburgh, Pa., has corresponded directly with Minister Canton relative to establishing in Nicaragua, at their risk, several wireless stations. This company is the one which put in the stations of the United Fruit Co. and is now taking up the matter of establishing a number of others along the Atlantic coast of Mexico and Central America with the purpose of obtaining constant communication between these countries and the United States. The company also offers to put in at Managua a wireless tower of sufficient power to communicate with Salvador. It is probable that within a month the engineers will leave for Nicaragua to carry out the work.

German cotton "*sparterie*" trimmings were exported to the extent of \$13,980,000 in 1911, an increase of nearly \$1,000,000 over 1910. This does not include "embroidery on cotton, woollen, or linen foundation," exported to the value of \$7,340,000 last year, an increase of over \$500,000.

GOOD RESULTS FROM TRADE-PAPER DISTRIBUTION.

[From Consul Nathaniel B. Stewart, Durban, South Africa.]

All trade publications and newspapers forwarded to the Durban consulate are filed for a certain period in its reading room for general inspection and reference. As new issues arrive the old papers are neatly wrapped and delivered by messenger to representative firms about the city in the lines of business to which they pertain, and sometimes mailed to other points where it is thought that they may be of interest.

This practice began one and a half years ago, and while letters of thanks for the publications have been received from time to time and in a few instances inquiries made about certain ones if they failed to reach the parties accustomed to receive them, it was not known whether their distribution was accomplishing much toward advancing American trade. Recently, however, inquiries were made of some of the firms to which the papers have been sent, and it was learned that a number of articles have been introduced on the market here as a result of advertisements appearing in the publications. As examples, a leading haberdasher and a leading wholesale and retail grocer each showed to me several articles in their respective lines now carried by them which they learned of through advertisements in the trade papers from the consulate. Professional men, as engineers, the general manager of the local tramways, and others, also expressed appreciation of the publications sent them.

Since good results are being brought about through sending these out as stated, it is intended in the future to utilize very carefully all papers received. Business men of the city who are unable to take the time to visit the consulate will, during spare moments, look over papers sent them, and in this way it may be possible now and then to interest in American products some who might otherwise never have these wares brought to their attention. It is hoped, in view of the foregoing, that all trade publications now being sent to this consulate will continue to be forwarded and that many others not now received will be supplied by the publishers.

BORROWING MONEY IN NORMANDY.

[From Consul Charles Adam Holder, Rouen, France.]

American firms seeking to secure funds for loan on western farm mortgages are advised that this district is not a good one in which to borrow money. Local commerce and industries, such as cotton manufacturing and the importation of coal, lumber, and wines, require a good deal of money, and as Normandy is the most conservative district of France foreign loans make no appeal to investors. A few loans have been made in Algeria, where the returns net 8 or 10 per cent, but this is because local investors have many interests there and are doing a great deal to develop that colony. Attempts have been made to interest local financial institutions in American loans and commercial paper, but so far without success.

Firms who have received Confidential Circular No. 35, issued January 22, 1912, by the Bureau of Manufactures, are advised that Simpson & Co., of Dalny, Manchuria, are no longer in business in that city.

AMERICAN SECURITIES IN SWITZERLAND.

[From Consul General R. E. Mansfield, Zurich.]

The better feeling among Swiss investors in general in regard to American industrial shares and bonds has been apparent within the past year. A Zurich firm has issued an attractive Manual of American Railway and Industrial Securities. The character of the publication which contains maps of the territory covered by the different railways and detailed statements of the various companies whose securities are offered is evidence of the interest prevailing in Switzerland concerning American securities.

Swiss investors, who are as a rule very conservative, have been imposed upon in a great many instances, especially in the shares and bonds of new industrial concerns and mining companies, offered by clever promoters, which resulted in a prejudice against foreign securities in general and American securities in particular. But in the past few years the business has assumed a more conservative form, and investors now have an opportunity to obtain desirable securities through reliable local bankers and brokers, who offer to their customers every facility for investigation and obtaining reliable information concerning the properties back of the bonds and shares they are offering. The result has been a general improvement in the market, and a decided increase in the sale of the better class of American securities in Switzerland.

MEXICAN INDUSTRIAL NOTES.

[From the Mexican Herald.]

Frontera Harbor Development.

The Frontera port works, under the direction of Federico Gonzalez Garza, are steadily advancing; 350 feet of the provisional canal across the bar, which will admit ships of deep draft to the Usumacinta River, have been finished. Already 150,000 bunches of bananas are being shipped monthly.

Cement Factory Absorption.

The modern cement plant La Tolteca, near Tula, State of Hidalgo, has been purchased by the Associated Portland Cement Manufacturers of London. The installation of additional machinery at the works is now rapidly nearing completion, which will give the plant a daily capacity of some 250 tons, or, say, 1,500 barrels. The purchasing association controls almost the entire cement trade of England and has an annual productive capacity of some 2,500,000 tons of cement. Something less than one-half of this output is shipped to foreign markets. The concern is also building cement plants in British Columbia, South Africa, and other parts of the world.

Real-Estate Loans in Prussia.

Consul H. J. Dunlap, of Cologne, advises that it would be difficult to secure money in that part of Prussia for loan on American real estate, for the reason that money is in great demand for local building and improvement purposes. Loans on real estate there bring 5 to 6 per cent, and the security can be seen and its value estimated by sworn "taxators."

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8824. Electrical supplies.**—An American consular officer in a Mediterranean country reports that a firm in his district desires to be placed in communication with American manufacturers of the following articles for use in electrical work of all kinds: Mica, micanite, oiled cloth and cardboard for insulating purposes, insulating compounds, fusible wire for use in switches, ebonite and rubber insulating materials, carbons for arc lights, cable, and wire. The firm desires to represent manufacturers of the above and similar articles, is in a position to push the sale of them, and can furnish desirable references. Correspondence in English, French, or Italian.
- No. 8825. Machines for roasting and grinding coffee.**—An import and export agent in a European country, who states that he is in a position to furnish first-class references, advises an American consulate that he desires to purchase American machines for roasting and grinding coffee. He might also possibly become the exclusive sales agent in the country in which he is located for certain types and makes. Correspondence may be in English.
- No. 8826. Material for locking a river.**—A foreign Government is about to undertake the work of locking a river, and an American engineering expert will be engaged to supervise the arrangements. After a thorough investigation of the project this engineer will return to the United States, where the drawings will be executed and then sent abroad for the work to be undertaken. An American consul writes that there is every prospect of the work being commenced within the present year, and furnishes the name of a firm that is prepared to import such machinery and material as may be required in the undertaking. American manufacturers should lose no time in placing themselves in communication with this well-known firm.
- No. 8827. Cement.**—A report from an American consulate is to the effect that a resident of Australia is desirous of getting in touch with American manufacturers of cement which will resist considerable heat. Correspondence should be sent to this person as soon as possible.
- No. 8828. Bathtubs.**—An American consular officer reports that a firm in western Europe desires to import bathtubs of moderate price. This firm is anxious to receive from American manufacturers not only catalogues, but also price lists and other descriptive literature. Correspondence may be in English.
- No. 8829. Oak staves.**—A business firm in Portugal informs an American consular officer that it is interested in the importation of oak staves into that country directly from the United States. While some staves come by direct vessels owned by local merchants, by far the greater part of this business is done via England, the transactions being financed by English firms which realize good profits. If American firms would give credit important business might result. Credit of six months to a year would be necessary, as the goods would have to be sold gradually, in order to maintain prices. The firm in question would like to know the chief ports of shipment of oak staves for Europe and also to communicate with American houses interested in this proposition. Correspondence may be in English, German, or Portuguese.
- No. 8830. Flour.**—A report from an American consular officer in Italy states that a firm in his district desires to import American flour. It is said that references will be furnished by this firm. Correspondence should be in French or Italian.
- No. 8831. Representation in Germany.**—An American citizen, who is now located in Germany, is desirous of representing a good American firm in that country. This person enjoys a good reputation and would doubtless make a good representative for firms needing such an agent.
- No. 8832. Staves and pitch pine.**—A firm of merchants and shipowners in a European country has informed an American consular officer that it desires to correspond with firms in the United States exporting staves and pitch pine. Correspondence may be in English.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 646. Navy Department supplies.**—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until June 4, 1912, for the following supplies. Firms interested therein should make application to the Bureau of Supplies and Accounts, giving the schedules desired by number: Schedule 4562, air hose; schedule 4557, galvanized plate steel, barge for torpedo testing purposes; schedule 4566, cheese cloth, rubber ferrules, air hose, running boat lights, oil meters; schedule 4576, traveling power hand cranes; schedule 4569, operating mechanical device, window and door frames, hardware; schedule 4574, lead silver facings, rubber hose, brass bolts and nuts, brass stud bolts, steel bolts and nuts; schedule 4563, furnishing and applying bituminous compositions; schedule 4571, wire galvanized steel netting, ebonite tubing; schedule 4565, hack-saw blades, iron tap bolts, boat chains, emery cloth, twist drills, mounted grind-stones, brass spur grommets, copper hammers and mauls, hardware, tools, combination locks and latches, wire steel nails, stencil cutting outfits, garnet paper, combination plow and blading planes, drawer pulls, iron pipe sets, machinists' sets, oil stones, flathead copper tacks, machinists' hand taps, taps and dies, pipe wrenches. Bids are invited until June 11, 1912, for the following articles: Schedule 4568, white ash, white hickory, maple, white plank oak, white oak, yellow pine, Oregon pine, redwood, Puget Sound pine spars, spruce, teak; schedule 4570, maple, North Carolina pine, poplar; schedule 4566, rolled naval brass, lead pipe for lining; schedule 4573, sheet brass, soft-rolled sheet copper, pig iron, brass pipe and copper tubing, seamless copper pipe, seamless condenser tubes, composition unions, composition angle valves, composition gate valves, safety and check valves, pop valves; schedule 4571, manganese bronze, corrugated sheet steel, cast-steel flanges and tees, black iron pipe, iron pipe with flanges, wrought-steel pipe; schedule 4564, bar round iron, galvanized medium steel angles, medium steel angles, billet steel, steel blooms, black sheet steel, galvanized sheet steel; schedule 4572, medium steel forgings; schedule 4575, tinned bacon, tinned corned beef, tinned biscuit, cocoa, flour in export bags, tinned flour, tinned lard, macaroni, evaporated milk, mustard, tinned peas, pepper, pickles, tinned prunes, rice, salt, tinned tomatoes; schedule 4567, alcohol in barrels, drop black in oil, crystallized granular sodium carbonate, fireproof glue, chrome green in oil, interior varnish; schedule 4574, graphite lubricating grease. Tenders will be received until June 18, 1912, for the following: Schedule 4578, gas-producing apparatus; schedule 4579, electric spot welding machine.
- No. 647. Furniture, floor coverings, fuel, and ice.**—Sealed proposals for furnishing articles covered by class 9, furniture and floor coverings, and class 14, fuel and ice, for executive departments and independent establishments, will be received at the office of the General Supply Committee, Union Building, Washington, D. C., until June 4, 1912. Blank forms, etc., furnished upon application to the committee.
- No. 648. White-oak and hickory lumber.**—Sealed proposals, in duplicate, will be received at the Rock Island Arsenal, Rock Island, Ill., until May 23, 1912, for furnishing and delivering at the arsenal quantities of white-oak and hickory lumber. Specifications and full particulars can be obtained by interested persons upon application to the commanding officer of the arsenal.
- No. 649. Equipments for wireless telegraph stations.**—Sealed proposals, in duplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until May 25, 1912, for furnishing the Signal Corps with four equipments, wireless station telegraph, to conform as far as possible to general specification No. 566, for installation in land stations. (Proposal No. 584.)
- No. 650. Concrete sidewalk.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until June 15, 1912, for concrete sidewalk on Burwell Avenue, Bremerton, Wash. Plans obtainable from the bureau or the navy yard, Puget Sound, Bremerton, Wash.
- No. 651. Steel lighters.**—Sealed proposals for the purchase of steel lighters will be received at the Isthmian Canal Commission, Washington, D. C., until July 3, 1912. (Circular No. 709.)

CHILEAN NITRATE BUSINESS.

[From Consul Alfred A. Winslow, Valparaiso.]

The nitrate industry starts out well for 1912, the production being greater for the first three months than ever before for a like period, with the exportations very heavy. During March the exports of nitrate amounted to 4,958,000 Spanish quintals (Spanish quintal = 101.4 pounds), against 2,538,700 quintals for 1911. During March, 1912, the United States took 954,100 quintals, against 598,900 quintals for the same month in 1911. The exports of nitrate for the first nine months of the nitrate year ending June 30, 1912, amounted to 45,116,926 quintals, against 40,819,705 quintals for the same time last year.

The consumption of nitrate in the world was very heavy in March, 1912, reaching 10,541,904 quintals, against 9,300,983 quintals for the same month of 1911. During the same time the United States, however, consumed only 515,750 quintals, against 772,875 quintals for 1911.

The price of nitrate was quoted at \$1.81 to \$1.83 United States gold per Spanish quintal for March, 1912, against \$1.66 to \$1.68 for March, 1911, and the nitrate people look for a very prosperous year. A strong selling propaganda is being pushed jointly by the Chilean Government and the producers.

The increased use of petroleum as fuel in the nitrate works will materially add to the profits, since it is claimed that fuel bills will be reduced 20 per cent, and these are important items in the nitrate business. There are now 12 nitrate works equipped for burning oil and several more installing fuel-burning plants.

CONSULAR WORK IN RUSSIA.

[From the London Times.]

The total number of paid consuls and vice consuls employed by the British Government in Russia is 14, viz, 1 consul general, 7 consuls, and 6 vice consuls. In addition to these there are several unpaid merchant consulships at the smaller ports and trade centers. The total staff of the British consulate at St. Petersburg consists of 4 individuals, whose combined annual salaries amount to £1,820 (\$3,857). At the German consulate general in the same city the number of the personnel (which includes 3 specially trained traveling commercial attachés) is 17, with salaries amounting to about £10,000 (\$48,665). In addition to the vast amount of work which such a staff can and does accomplish, the consulate general pays a fixed fee of 1 ruble (51.5 cents) to merchants for every letter containing information on commercial matters, a system which secures early information from all parts of the country.

SOYA BEANS IN ARGENTINA.

[From the Monthly Magazine of the Liverpool Chamber of Commerce.]

Experiments with soya beans in Argentina during the past three years having proved successful, leading estancia proprietors inform A. Grenville Turner, who selected the seed, that they intend to grow the crop on a commercial scale. The beans will be grown in preference to linseed, as a restorative crop, in rotation with wheat. As the percentage of oil in soya beans varies from 15.8 per cent to 23.2 per cent, inquiries are being instituted for seed beans having a high oil content, also for early and late varieties, to facilitate harvesting operations with other crops. The germinating capacities of soya beans vary considerably; all parcels of seed should, therefore, be carefully tested for germination before shipment.

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IMPROVED TRADE OF MANCHESTER.

[By Consul Church Howe.]

With the opening of 1911, it was expected that a further improvement in the Lancashire cotton trade would follow that experienced during the closing months of 1910. The spinning trade was troubled generally during the first half of the year by the dearth of raw material, but a substantial decline in the second half improved the situation and the spinners were able to dispose of an increased production at profitable rates. Spinners of American cotton are reported to have obtained good margins on the staple counts and manufacturers were well engaged. While dividends have been few, the losses sustained were less serious than in 1910 and larger profits were shown by the more favorably circumstanced companies.

Conditions in the Textile Towns.

The spinning industry in the Accrington district, which is chiefly confined to American yarns, was handicapped in the earlier part of the year by the scarcity of cotton. Full time was worked in both the spinning mills and the weaving sheds and wages were good. The 16,000 looms in this district are almost entirely taken up with the manufacture of plain cloths. Active measures were taken by the local labor union to secure more members, and 1,800 new members were added, bringing the membership of the Accrington association up to 6,000.

In Bolton, as in most of the Lancashire spinning and weaving centers, the trade was seriously affected by the labor troubles during July and August. A number of small disputes took place in the spinning trade. In the card-room section trade was as bad during the first seven months of the year as during the two preceding years, but after that there was some improvement. The indications point to better trade, but the card-room workers have not yet felt the benefit of the improvement in the spinning trade. During the past two years the employers have been speeding up somewhat, so that the card rooms can supply more than the spinning rooms require,

especially when the latter are largely engaged on fine counts. An improvement in the spinning of coarse counts would mean better trade in the card room.

With the simultaneous increase in the demand for cloth from nearly all markets, both in England and abroad, the looms in the Burnley district were fully occupied throughout 1911. India is a most important and steadily increasing market for Burnley goods, as the printed goods made here seem to be suitable to the Indian climate and their low prices meet the demands of the poorer classes.

In spite of losses reported throughout the first half of 1911, the cotton trade of Bury and its surrounding district was more prosperous than that for a few years previous. The Bury manufacturers cater largely to the Far Eastern markets, and it is said that the difficulties in China and Persia have had more effect here than in any other Lancashire town of the same size. There were few mill extensions made during the year. No organized short time was worked, but in several cases manufacturers found some difficulty in running all their machinery full time, owing to a shortage of weavers. Weavers in the fustian trade received a readjustment of wages amounting to an increase, and the year closed with a grant of an increase in wages to loom jobbers in certain heavy-weight goods.

Revival in Weaving Trade of Blackburn.

There are some 80,000 looms at work in Blackburn, and the weaving trade in 1911 experienced a welcome revival from the period of depression extending back to 1907. All branches shared in the general improvement. The year opened with practically every loom running full time, but cotton and yarn were dear, and while there was a fair booking of orders, there was little or no margin. The demand increased as the year advanced and the high prices were no obstacle to business. Although prices eased when the favorable estimates of the new cotton crop were confirmed, the cheaper cloth could not overtake the shipments to foreign markets, where the goods passed quickly into consumption.

Besides the assurance of a good cotton crop, an important factor in the improving trade was the excellent economic condition prevailing in India, Blackburn's chief market for cloth, as a result of two good harvests. This steadied buying, and with a satisfactory demand from China and other large Eastern markets, orders were booked well ahead, although prices did not become satisfactory until early autumn. It is regarded as a strong indication of continued good business that there was no accumulation of stocks in India, China, or any other great market for Lancashire piece goods. Some difficulty was experienced during the year owing to the shortage of weavers, caused mainly by the emigration of operatives to Canada and the United States during the periods of depression in the home trade.

Fair Year for the Oldham Spinners.

In Oldham the year opened with brighter prospects than had existed since the boom period, although these were somewhat marred by the high prices of cotton. Profits began to decrease again in April, when the advisability of resuming short time was considered by the Federation of Master Cotton Spinners. The proposal failed to receive the required majority, but the recommendation to stop for a full week at Whitsuntide, June 5 to 10, was generally carried out.

While the period from the end of June to the middle of September was the worst of the year for the spinning companies, they took orders for delivery in the new crop period, on the basis of lower prices of cotton expected from the reports of the new crop. Their anticipations were in the main realized, for there was a drop of over 4 cents a pound in the price of cotton between September and October. The lower price stimulated a healthy demand in the trade and the spinners were able to obtain a price which left a fair margin of profit. The prospects of improved trade induced many new mills which were either empty of machinery or only partly equipped to complete their equipment and at least 300,000 new spindles were put in operation in the Oldham district.

The trade was interfered with by the labor troubles among the transport workers and a stoppage of mills took place, owing to the interruption in the supplies of cotton and coal. This stoppage occurred at a time when the trade was working at little or no profit and the effect was not so disadvantageous as it would otherwise have been.

The local velvet trade was also good during 1911. The Oldham weavers obtained an advance in wages in the middle of the year and an agreement was reached giving an increase of 5 per cent on all wefts of 40s and below and $2\frac{1}{2}$ per cent on wefts above 40s, while other details in the official list were altered to the advantage of the operatives.

Yarn Companies Show Profit—Preston District.

The certified accounts of 100 limited liability companies producing yarn in Oldham, which operate a total of 8,623,180 spindles and have a share capital of \$18,142,594, show a net trading profit of \$145,080, which is equal to \$3.65 per \$486.65 (£100) for 1911, against a loss of \$50.52 per \$486.65 in 1910. With the help of reserve funds, an average dividend of \$4.35 per \$486.65 was declared, which is 1 per cent less than that paid in the preceding year. The mortgage and other loans of these companies amount to \$12,601,660, bringing the combined share and loan capital of these companies up to \$30,744,254. Assuming the average interest paid at 4 per cent and that this was not charged to trade, the profit earned on the whole capital in 1911 would have been \$644,275. This is equal to a profit of \$10.26 per \$486.65, against a loss of \$22.50 in 1910. The reserve funds and credit balances fell during the year from \$1,902,295 to \$1,030,218.

In the Preston district the cotton trade was steady. There are about 85 mills in the immediate vicinity of this city, containing 2,184,268 spindles and 65,111 looms. Plain and fancy goods, especially shirtings, are manufactured extensively here. While employment was good, the operatives' officials report that 1911 was a bad year as far as poor material was concerned, as a result of which the wages of the weavers were largely affected. The complaints of bad material were not confined to any particular counts.

Raw Cotton Prices—Trade Associations.

The lowest price of middling American cotton during 1911 was 9.84 cents and the highest 16.84 cents. The lowest for fully good fair Egyptian cotton was 17.75 cents and the highest 22.125 cents.

Being situated in the heart of the Lancashire cotton-spinning district, having 45 per cent of the spindles of that district within a radius of 8 miles, Manchester possesses great advantages as a distributing center for raw cotton. The interests of the spinners who

import cotton directly to this port are safeguarded by the Manchester Cotton Association, which is made up of cotton merchants, brokers, and many spinners. At present the spinning members represent 20,000,000 spindles. The association's board consists of 21 directors, representing leading Lancashire cotton firms, and there are 9 committees which carry on the work of the association. The direct importation of cotton at Manchester has increased from 32,059 bales of American and 34,202 bales of Egyptian in 1894-95, the first year after the opening of the Manchester Ship Canal, to 489,727 bales of American and 219,566 bales of Egyptian in 1910-11.

In April the affiliation of the Yorkshire Master Cotton Spinners' Association with the Federation of Master Cotton Spinners' Associations increased the number of spindles controlled by the federation by nearly 1,000,000. The international federation estimated the number of spinning spindles in the world on August 1, 1911, at 137,278,752, compared with 133,384,794 in 1910. Those in Great Britain increased from 53,397,466 in 1910 to 54,522,554 in 1911. In Japan the number increased from 1,948,000 to 2,131,494; in Germany from 10,200,000 to 10,480,090; and in the United States from 28,349,000 to 28,872,000.

Textile Machinery Exports—Velveteen Trade—Bank Clearings.

The exports of textile machinery from the United Kingdom decreased from \$37,054,518 in 1910 to \$32,992,173 in 1911, the trade being divided by countries as shown in the following table:

Country.	1910	1911	Country.	1910	1911
United States.....	\$5,559,884	\$2,304,950	Japan.....	\$1,763,153	\$1,708,496
Russia.....	4,266,256	5,545,216	South America.....	1,969,365	2,188,504
Germany.....	4,233,821	4,458,892	British East Indies.....	5,989,192	4,826,224
Netherlands.....	731,995	911,919	Australia.....	241,364	257,131
France.....	4,016,619	3,678,490	Other countries.....	7,597,739	6,955,523
China, including Hong-kong.....	685,130	156,818	Total.....	37,054,518	32,992,173

The velveteen trade in Manchester experienced the greatest boom in its history during 1911. The shipments to the United States began with a demand for velvet uppers for shoes, followed by a call for velvets for all classes of millinery and ladies' gowns. The total shipments of cotton velvets, cords, and fustians to the United States amounted to 6,233,449 yards, valued at \$1,608,668, in 1911, as against 3,113,038 yards, valued at \$832,860, in 1910. The velvet season for shipments to the United States begins in May and ends in October. All orders for delivery in 1912 are already booked and heavy shipments to the United States are contemplated during July, August, and September.

The report of the Association of Manchester Clearing Bankers shows that the checks and drafts passing through the clearing house during 1911 amounted to \$1,635,923,856, an increase of \$137,492,616 over 1910.

Hat Trade Prosperous—Increased Canal Traffic.

All branches of the hat trade were prosperous during 1911 and the exports from the United Kingdom showed an advance over the preceding year. The exports of hats from the Manchester district to the United States increased from \$194,794 in 1910 to \$201,621 in

1911. Canada takes large quantities of hats manufactured in this district and good orders from that country were reported. In addition to the increasing foreign sale, the home demand for stiff hats was satisfactory. The local trade in hat leather was steady during the year.

In spite of the disorganization and congestion resulting from the strike of the seamen, dockers, and carters, which began in July, the total traffic handled on the Manchester Ship Canal during 1911 amounted to 5,217,812 long tons, paying a revenue of \$2,826,662, as compared with 4,937,631 long tons, paying a revenue of \$2,704,484 in 1910. The imports of cotton, grain, foodstuffs, oil, manufactured iron, and unclassified goods and the exports of textiles, machinery, and salt were greater than those of 1910, while the imports of timber decreased. The Board of Trade report for 1910 shows that Manchester took fourth place among English ports in the amount of imports and exports handled. The total imports from foreign ports to Manchester, including Ellesmere Port, Runcorn, Warrington, and Partington, were valued at \$145,727,342, and the exports at \$85,110,218 in 1910, a total increase of \$19,466,000 over 1909.

An increasing proportion of the traffic at the Manchester docks continues to be forwarded or received for export by railway. The Ship Canal Co. is a railroad company and performs all the terminal work, such as loading and unloading, and hauls the cars with its own locomotives to and from the main line junctions with the dock railways. This company quotes through rates for the convenience of traders inclusive of canal charges and railroad conveyance to and from all parts of the country.

Manchester as a Grain Port.

During the last few years Manchester has made rapid strides in the flour-mill industry, and at present several new mills are being erected, one of which will consume about 50,000 tons of grain a year. Within a radius of 10 miles from Manchester there is a population of over 2,000,000, and the imports of grain have increased from 15,000 long tons in 1894 to approximately 493,000 long tons in 1911, of which some 117,106 tons were received from the United States and Canada.

The grain elevator at the Manchester docks was the first in this country to be constructed purely on the American principle, and it practically differs from the American elevators only in the arrangements for delivering the grain. In England grain is still delivered to the millers chiefly in bags.

This elevator has a capacity of 40,000 long tons, or 1,500,000 bushels, of grain. It contains 226 bins, varying in capacity from 37 to 300 tons, constructed of wood, in such a way as to keep the grain in the best possible condition.

The facilities for discharging grain from steamers into the elevator consist of a marine leg at the water side with revolving buckets, which has a capacity of 350 tons per hour. In order to accelerate the discharging of grain in parcels or from the smaller holds of a vessel, the canal authorities have recently supplemented the discharging apparatus by constructing eight pneumatic pipes, which suck the grain into the marine tower at the rate of about 25 tons per pipe per hour. These pipes work simultaneously with the marine leg.

The rates charged against the steamer for discharging grain cargoes are reasonable, and combined with the quick dispatch given every inducement is offered to the owners of vessels to discharge the cargoes at Manchester.

Grain-Delivery Facilities.

The grain is weighed and the weight recorded by both the owners of the grain and the representatives of the vessel. The appliances for delivery are so arranged that grain can be sacked, weighed, and loaded into 40 freight cars, 10 horse wagons, and 2 barges simultaneously. As the delivery of grain in bulk to freight cars is much quicker and cheaper than shipment in bags, the millers of some parts of Lancashire appear to be seriously considering making the slight alterations in their mills necessary to permit them to take the delivery of grain in bulk. The conveyance of grain in hopper cars over the various railroad systems will doubtless have to be seriously considered in the near future. Wheat from Karachi is invariably delivered in the original bags, which are unloaded at one of the large transit sheds at Manchester where there are facilities for redelivery.

The canal authorities have also acquired several floating grain elevators, which are used to accelerate the unloading of liners from the North American ports. These elevators discharge the grain over one side of the ship into barges while the general cargo is being taken over the other side to the quay transit sheds. The loaded barges are then towed to the main elevator and the grain stored there.

Trafford Park Manufacturing District Growing.

More than 80 firms have already established themselves on the Trafford Park estate, which adjoins the Manchester Ship Canal. A special arrangement puts all the factories in Trafford Park within 12 cents per ton of all the steamers which operate frequently and regularly to and from the port of Manchester. The firms established here include the British Westinghouse Electric & Manufacturing Co. (Ltd.), the American Car & Foundry Co., the Ford Motor Co., and the Dahlstrom Metallic Door Co. of America.

The Southern Cotton Oil Co. of Great Britain, whose parent company has 280 cottonseed-oil works in the United States, opened a plant at Liverpool during 1911, and is now erecting extensive works in Trafford Park to turn out 2,000,000 pounds of lard a week. The British Reinforced Concrete Co. (Ltd.), operating under the Clinton patents, are building works in the same place for the manufacture of wire cloth for reenforcement, fencing, etc. The Annex (Ltd.), a company with a strong financial backing, is also building a large plant at Trafford Park for the manufacture of corn products, consuming 50,000 tons of corn a year. This park is rapidly becoming the home of many modern flour mills. The English Textilose Manufacturing Co. will soon commence the manufacture of cloth from paper materials by the Claviez process, at their new works in this district, and another company is building an extensive whisky bottling and distributing agency nearby. A small factory in this region has been rented by a Liverpool firm for the manufacture of motor accessories.

Ocean Steamship Service.

The loading of the two twin-screw steamers *Argyllshire* and *Shropshire* at Manchester for Australian ports was a feature of some importance in the Australian and New Zealand trade. These ships are each

547 feet long over all, with a beam of 61 feet 4 inches, and are the largest that have navigated the Manchester Ship Canal. The sailings to Bombay increased during 1911, 49 Conference steamers having loaded at Manchester.

The weekly service between Manchester and Canadian ports was continued throughout the year, communication being provided with Quebec and Montreal during the summer and with St. John and Halifax when the St. Lawrence River is frozen. Manchester is one of the principal ports for the importation of wood pulp, owing to its proximity to the Lancashire paper mills, and this forms the bulk of the cargoes carried by the various steamship lines from Norway and Sweden. Shipments are also made from Montreal, Quebec, Chicoutimi, and Newfoundland. Manchester imports over 130,000 tons of wood pulp annually, and this material is said to have displaced esparto grass in the making of paper.

The imports of bananas into Manchester amounted to 2,501,237 bunches during 1911, this port being the chief point of entry in the United Kingdom for this trade. During 1912, however, the steamers in this trade will be transferred to Garston, where special accommodations for storing the fruit have been provided by one of the railroad companies.

Regular sailings from Manchester to Boston, Philadelphia, and New York are maintained throughout the year, and during the cotton season regular sailings are made direct to Manchester from Galveston, New Orleans, Savannah, Brunswick, and Charleston. A large alkali company on the banks of the ship canal regularly imports cargoes of phosphate rock from the Southern States, effecting a considerable saving in the cost of transportation, as the ships can discharge their cargoes directly into the works.

American Motor Cars Make Steady Progress.

The Manchester district is undoubtedly second only to London in facilities and opportunities for the sale of automobiles, and London authorities have described Manchester as the world's best center for the sale of commercial vehicles. The Manchester Motor Show is the most important trade exhibition held in England, with the exception of the one at Olympia, London. American manufacturers are making steady progress in this district and agencies have been established in Manchester for the Flanders, E. M. F., Mitchell, White, and Overland cars, of American make, while the Ford Co., of Detroit, has a factory here where the motor parts, shipped direct from the United States, are assembled and the finished automobiles turned out. This plant has a capacity of 3,000 to 4,000 cars per annum.

The hostility to the American car manifested by many British newspapers and journals dealing with motor matters has subsided to some extent, no doubt owing to the many satisfactory trials of American cars and the fact that the British public has come to recognize the American automobile as a machine that has taken a strong position in the trade in competition with English, French, German, and Italian manufacturers. A local paper, commenting on this growth, said:

America is only a few days distant from England, and with the best of American methods of obtaining publicity it does not take long for the merits of a car to be made known to the English public. So far there does not seem to be any settled plan of campaign against them by the English makers. For a long time it was the practice in England to book the order and build the car afterwards. In America the firms

build the car to create the demand. The public want a smart-looking, low-priced car that will stand rough wear.

The American machine is not the thoughtlessly designed, fragile-looking article that we have been led to believe. If the British maker does not immediately rise to the occasion, the British agent and the buying public will, and when it is too late the wholesale trade will be the American's.

American Breakfast Foods Imported—Exports to United States.

The importation of American breakfast cereals into this country continues on a great scale, and Manchester, owing to its geographical position, has become the principal center of distribution for the mid-land counties and northern England. During the past year approximately 200,000 cases were imported direct to Manchester, including "Quaker Oats," "Force," "Grape-nuts," "Hornby's Oats," "Molos-cuit," "Flaked Oats," "Shredded Wheat," "Triscuit," and "Flaked Maize." Present indications point to an increasing demand in Great Britain for cereal breakfast food.

The exports from Manchester to the United States, as invoiced at this consulate, dropped from \$16,306,990 in 1910 to \$15,613,941 in 1911. The exports by articles are shown in the following table:

Articles.	1910	1911	Articles.	1910	1911
TO UNITED STATES.			TO UNITED STATES—cont'd.		
Asbestos.....	\$115,462	\$94,870	Provisions.....	\$18,877	\$18,235
Balata and other belting.....	137,942	23,963	Quilts.....	87,455	93,930
Brattice cloth.....	11,051	1,174	Rags and paper stock.....	1,918,188	1,997,905
Buttons.....	885	3,482	Shawls.....	5,853	4,443
Card clothing.....	88,730	84,337	Silk, and silk and cotton		
Carpets and rugs.....	24,072	23,003	piece goods.....	44,671	34,516
Cattle and other hair.....	38,457	64,308	Silk yarn.....	153,635	166,888
Chemicals.....	831,361	712,718	Steel wire, etc.....	146,549	55,040
Colors and dyestuffs.....	180,768	175,501	Tape and braid.....	28,039	22,054
Cotton:			Tin sheets, etc.....	166,123	39,777
American.....		25,741	Towels.....	63,567	55,333
Bengal.....	4,972		Waterproof garments and		
Egyptian.....	25,324	4,894	cloth.....	112,104	80,418
Cotton and worsted stuffs.....	283,513	273,843	Wool felt, blanketing, lap-		
Cotton piece goods.....	2,415,197	2,439,524	ping, etc.....	81,729	73,793
Cotton velvets, fustians, etc.....	832,860	1,608,668	Yarn, other than cotton and		
Cotton yarn and thread.....	2,764,314	2,716,741	silk.....	73,866	46,423
Curtains, lace.....	19,830	21,577	All other articles.....	102,702	117,950
Elastic web, cord, etc.....	11,554	11,355			
Felt and other hats.....	194,794	201,621	Total.....	16,306,990	15,613,941
Furniture and household			TO PHILIPPINE ISLANDS.		
effects.....	25,825	38,059	Chemicals.....	49,646	51,858
Furs, skins, etc.....	60,389	49,597	Colors and dyestuffs.....	26,773	24,469
Glass, china, and earthen			Cotton, American.....	8,687	38,928
ware.....	35,566	23,153	Cotton and worsted and		
Gloves, kid.....	20,908	22,371	worsted stuffs.....	22,575	20,799
Handkerchiefs.....	856,763	333,035	Cotton piece goods.....	1,589,904	1,020,358
Hide cuttings.....	45,821	62,237	Cotton velvets, fustians, etc.....	18,686	23,850
Hides.....	81,967	61,590	Cotton yarn and thread.....	49,505	58,010
Hosiery.....	39,671	34,462	Glass, china, and earthen		
India-rubber sheets, pouches,			ware.....	13,139	13,988
etc.....	59,030	89,367	Handkerchiefs.....	97,881	28,941
Iron, pig, etc.....	186,733	64,666	Iron, pig, etc.....	105,708	83,855
Laces, nets, etc.....	129,174	87,161	Linens.....	26,414	21,152
Leather, etc.....	330,892	441,375	Machinery.....	6,728	15,767
Linens.....	1,475,037	1,344,003	Provisions.....	35,508	25,572
Linoleum.....	354,842	354,036	Steel wire, etc.....	16,678	16,290
Logs, mahogany, oak, etc.....	8,770	2,795	All other articles.....	78,172	82,987
Machinery.....	1,876,120	1,026,158			
Needles, pins, etc.....	15,332	15,397	Total.....	2,146,004	1,521,743
Paper, paper hangings, etc....	219,696	270,424			

The shipments to Porto Rico in 1911 were valued at \$11,802, a decrease of \$8,229 compared with the previous year. These exports consisted principally of linens valued at \$8,519, handkerchiefs \$1,013, and cotton piece goods \$978. The exports to Hawaii amounted to \$3,445, a gain of \$596, and consisted mainly of cotton and worsted goods and laces and nets.

CONSTRUCTION WORK ABROAD.**CANADA.**

[From Consular Agent Sydney F. Culver, Fredericton, New Brunswick.]

New Canadian Railway, Power Station, and Telephone Enterprises.

The construction of the St. John & Quebec Railway began May 2, when two engineers left to commence work on the Fredericton and Woodstock branch. Clearing the right of way is progressing rapidly.

The hydroelectric station, which is to utilize the power of the Eel River and its tributaries in Carleton County, is to be constructed in a short time. When completed the station will be in position to supply cheap power to all the neighboring towns, including Fredericton. Letters of incorporation were secured in 1911.

A company capitalized at \$98,000 is applying for letters of incorporation to do business under the firm name of the Welsford & Hamstead Telephone Co. (Ltd.). It proposes to carry on a general telephone business in Queens County, with a head office in Welsford.

[From Monetary Times, Toronto.]

Hydroelectric Power and Railway.

Saskatoon has grown into a city of 18,000 in eight years, and is the distributing center for over 250 surrounding towns and villages. Saskatoon may be entered by rail from 9 different directions (before long from 14).

A charter has been granted to the Canadian agency, London, England, for constructing a river dam about 13 miles north of Saskatoon, the preliminary work upon which is proceeding. Altogether, the Canadian agency will spend \$2,000,000 during 1912 on this construction and in laying about 9 miles of street railway, which will be operating by September, 1912, a portion of the steel being down already. This is the first installment of a service which, within the next few years, will radiate in every direction throughout and adjacent to the city and will furnish electric power at low rates.

CHILE.

[From Consul Alfred A. Winslow, Valparaiso.]

Railroad Construction.

Railroad construction progressed very materially during 1911 on the 20 lines under construction for the Chilean Government, covering 1,580 miles, to cost \$56,580,331 United States gold when completed. At the close of the year rails were laid on about one-half of these new lines. Five of the lines are to be completed and opened for traffic during 1912. During the year 8,500 persons were employed on the several works.

Owing to a shortage of funds work is not to be pushed so hard on the Government railways during 1912. More is to be devoted to equipping the lines now constructed. It is estimated 240 engines and 2,500 cars will be needed within the next year to properly handle the increasing traffic of the country. An American manufacturer just secured an order for one hundred 20-ton steel freight cars, and it would seem American interests might be able to get more of this business. This can be done only through an agent here in Chile, who can keep in touch, study plans, etc., and submit bids, for the time given is entirely too short to do business by mail.

For the information of interested parties a list of firms in position to handle this business is forwarded [and may be had from the Bureau of Manufactures].

Passenger Coaches to Be Built in Chile.

The manager of the Chilean Government railways has been instructed to contract with Balfour, Lyon & Co., of Valparaiso, for 10 first-class coaches, at \$8,699 United States gold each, and 20 second-class coaches, at \$6,023 each. These are to be built according to specifications furnished by the Government similar to those supplied when bids are requested for foreign cars. This contract presents an opening for material, since most of the material needed must be imported.

ROUMANIA.

[From American Minister John B. Jackson, Bucharest.]

Improvements in Many Cities.

Before the adjournment of the Roumanian Parliament laws were passed to authorize several cities and towns (Curtea-de-Arges, Bacau, Botosani, Gorj, Tulcea, Cernavoda, and other places throughout the whole country) to contract loans, the proceeds of which are to be applied to the construction of schools and other buildings, to provide water supply, public fountains, sewers, electric lighting plants, etc., and to other purposes. Military casinos are to be constructed at Bucharest, Constantza, and elsewhere. The city of Bucharest has been authorized to contract a loan of \$6,000,000 (as noted in Daily Consular and Trade Reports for Apr. 20).

Much of the material and practically all of the fittings to be used in the contemplated construction work will be imported from abroad, and although the difficulties of transportation are considerable (especially in view of the existing situation at the entrance of the Dardanelles), it would be worth while for American manufacturers to pay some attention to the question of their supply.

AUSTRIA.

[From Ambassador R. C. Kerens, Vienna.]

Electric Tram to Austrian Thermal Springs.

The town of Hofgastein (Province of Salzburg) contemplates construction of a local 3-mile electric railway from the railroad station to the thermal springs and thence to Badgastein to connect with the thermal springs there. A survey has already been ordered.

ENGLAND.

[Prepared from London Times by Consul General John L. Griffiths, London.]

Electrification of British Railways.

Extensive plans for the electrification of the London suburban railway lines are under serious contemplation. These involve the substitution of electricity for steam on some hundreds of miles of railways in the London district, and it seems certain that the next few years will, for all practical purposes, see the end of the long reign of steam for traction purposes on the suburban routes serving the metropolis. The advantages of electrical operation for handling such traffic have been so completely demonstrated that the question has largely passed out of the technical into the financial phase. In some cases the terms on which the necessary capital for conversion could be raised are such as to induce railway boards to postpone the work of electrification until the latest possible date, and in no instance is the provision of the large funds for converting to electric working a large mileage quite a simple problem.

The railways which are considering the subject of the electrification of portions of their lines are the Great Eastern, the Midland, the Great Northern, and the Lancashire & Yorkshire Railways.

The plans for electrification of portions of the London & South Western Railway Co.'s lines, it is said, have now been settled and full details will shortly be announced.

With regard to matured plans for electrification of the schemes authorized, the East London conversion is making good progress, and on the London & North Western and North London Railways the placing of the contract for the work is only awaiting parliamentary sanctions of the bills. The new London & North Western local lines from Willesden to Watford, which as between Willesden and Harrow were to have been opened for traffic in May, will not in consequence of the delays arising from the coal strike be in operation until July, but the entire new route will be worked as a steam railway before the end of the year, and at a later date these lines, as well as the North London routes included in the scheme, will of course be electrically operated.

Recovery of Traffic.

The London, Brighton & South Coast Co. will probably remain alone in the London area as the adherent of the single-phase alternating-current system, which, whatever its advantages for main-line working, is not generally accepted as the ideal system for suburban traffic. That the conversion of the South London and Crystal Palace lines has had the effect of recovering traffic formerly lost to omnibus and tramway interests to a remarkable extent is common knowledge, but from the financial standpoint it is stated that the single-phase system is associated with high maintenance costs, and no figures have yet been published to refute the arguments of its critics. There is also the fact that the interference to telegraph and telephone circuits is far more serious with this system than with the direct current working, and it is known that action is now being taken by the post office against the London, Brighton & South Coast Railway on the ground of interference with the working of the lines carried on wayleaves over the Brighton system. This action should come on for hearing within the next few weeks.

An interesting development in connection with the battle of the systems is the decision of the Lancashire & Yorkshire Railway to work the Holcombe Brook branch on the high-tension direct-current system, and the results of this installation, the first of the kind to be employed in Great Britain, will be watched with great interest from the financial as well as from the merely operating standpoint. The advantages of electrical methods are from other points of view well recognized; it is on the financial side of operating and maintenance costs that statistics are now required.

EGYPT.

[From the Near East.]

New Bonded Warehouses.

The customs administration has granted to the Société Anonyme des Entrepôts et du Commerce the privilege, hitherto exclusively held by the Egyptian Bonded Warehouses Co. (Ltd.), of erecting sheds for the storage of goods within the customs boundary. The company has bought a piece of land on the quay, for \$80,000, on which to erect the sheds.

CEYLON.

[London Times correspondence from Colombo.]

Colombo Harbor Works.

On May 1 the governor laid the memorial stone of the new arms of the southwest breakwater completing the harbor works. The construction has been carried out after the designs of Coode, Son & Matthews, at a cost of \$15,000,000. It is proposed to construct, at a cost of \$5,000,000, a breakwater south of Galle, providing anchorage for 23 steamers, which would relieve Colombo.

SOUTHERN NIGERIA.

[From report of Comptroller of Customs at Lagos, West Africa.]

Good Buildings Taking the Place of Huts—Motor Transport.

Lagos, a town with nearly 80,000 inhabitants, constantly increasing in numbers, and with a rapidly expanding trade, affords an exceptional opening to a firm of British builders, with no very large capital, to work up an extensive business. The estimated expenditure by Government in 1912 on buildings in Lagos and its immediate vicinity amounts to some \$330,000. In addition to Government expenditure, with the increasing trade of the town and wealth of the people substantial buildings are taking the

place of the huts which formed the native portion of the town, and a large private business might be done with European merchants and private individuals.

The policy of developing Southern Nigeria by means of road making has resulted in the existence of several hundred miles of roads suitable for mechanical transport. Motor cars are used by several Europeans, and two native gentlemen in Lagos have recently acquired cars. In addition to Government transport services, the native government of Abeokuta has successfully arranged a small transport service employing six motor wagons. Several motor bicycles are used by natives. There is, however, a good opening for a motor transport service in Lagos in connection with the removal of trade goods from the warehouses to merchants' premises and to the railway, while much remains to be done to bring about a more general use of motor traction throughout the country.

PHILIPPINE ISLANDS.

[From the Manila Free Press.]

Building of Sugar Centrals—Motors Evidence Prosperity.

The first modern sugar mill in the Philippines was formally opened in February on the hacienda of Señor Esteban de la Rama, in Talisay, Occidental Negros. It cost \$125,000. It is smaller than the sugar central now under construction at San Jose, Mindoro, but has a daily (12-hour) output of 14,000 pounds of 96° sugar, and will pay for itself in a few years. The central was built entirely by Filipinos, Señor de la Rama, aided by Señor Zoilo Diaz, electrical engineer, directing the work. Señor de la Rama is taking steps to construct another central with thrice the capacity at Bago, where another small central belonging to Urquijo y Compania is nearing completion.

A noteworthy feature incident to the ceremonies of inaugurating the new central was the large number of automobiles present. There were no fewer than 30, owned by hacendados who rode in for the occasion. Nothing could better testify to the prosperity that now reigns in Negros.

New Club Building—Bridges and Roads.

A \$50,000 Army club will soon be erected at Baguio, near the site of the Baguio Country Club. The building will be of reenforced concrete, and it is said that it will be the finest club in any Army post of the Philippines.

Of the \$2,250,000 made available for public works in the islands by the gold-standard fund [as noted in Daily Consular and Trade Reports for May 2], \$800,000 has already been loaned, 23 provinces having benefited. Neuva Ecija leads off with a budget of \$90,000, Ilocos Sur is next with \$81,000, Pangasinan third with \$72,000, and Ambos Camarines fourth with \$50,000. The loans to the first three Provinces named will be used in constructing bridges, while Ambos Camarines will use its loan for road and bridge construction.

DYNAMITE AND BLASTING MATERIALS FOR PANAMA.

[From announcement of Isthmian Canal Commission.]

It is estimated that only 3,986,500 pounds of dynamite will be required for the canal work during the year beginning July 1, 1912. Saltpeter dynamite is specified, but bids will be received on Trojan or similar dynamite that can meet the requirements of the work.

The amounts purchased in past years were as follows: In 1907, 5,087,000 pounds; 1908, 6,822,000 pounds; 1909, 8,270,000 pounds; 1910, 10,403,800 pounds; 1911, 9,501,850 pounds; 1912, 8,533,000 pounds. The comparatively small amount estimated for the forthcoming year is due to the approaching completion of the excavation work, care being taken to avoid an overstock.

The estimate for blasting materials is as follows: Blasting caps, number, 328,000; tape fuse, feet, 877,000; insulating tape, one-half pound rolls, 3,680; connecting wire, feet, 10,000; lead wire, feet, 555,300; electric fuses, feet, 627,100; triple tape fuse, feet, 36,000; blasting powder, pounds, 20,000; and lead wire, feet, 25,000.

EUROPEAN STEEL COMBINATIONS.

[From London Times dispatches.]

Partial Renewal of German Union.

The negotiations for the renewal of the German Steelworks Union were concluded at Dusseldorf on May 1 after an uninterrupted sitting of 19 hours. The agreement is only partial. It has been decided to renew for five years the control of production and sale of "A" products—half-finished iron products, railway material, and shaped iron. On the other hand, the agreement regarding "B" products—bar iron, rolled wire, plates, and tubes—has expired.

It is regarded as a success that the union for "A" products has been prolonged for a number of years instead of being renewed provisionally until a complete agreement could be reached. This settlement was purchased, however, by abandoning the union for "B" products. It is generally stated that there is not likely to be any reduction of prices of "B" products in the near future and that attempts will be made to form separate syndicates for the various "B" products.

The Belgian Agreement.

An agreement has been reached between all the Belgian steelworks for the renewal of the so-called "Comptoir des Aciéries Belges" controlling the home and export sale of steel joists and channels above 3 inches manufactured in Belgium.

The existing arrangements will expire on July next, and from that date for five years the Belgian syndicate will include the following firms: In the Liege district—Ougrée et Harihay Company at Ougrée, John Cockerill at Seraing, Aciéries d'Angleur at Tilleur, and S. A. Athus-Grivegnée at Grivegnée; in the Hainault Province—the Providence works, the Sambre et Moselle works, Usines Métallurgiques du Hainault, Thy le Chateau Steelworks, the firm Boel at La Louvière, and finally the Clabecq rolling mills at Clabecq, near Brussels.

WOOL PRODUCTION IN GERMAN AFRICA.

[Reuter dispatch from Berlin.]

A telegram from Windhoek (German Southwest Africa) states that the Emperor William has purchased for \$23,000 the farms of Dickdorn and Kosof, in the district of Gibeon. The farms are to be devoted to raising of sheep for wool. Herr Emil von Koenen, the owner of the farm, will remain tenant.

The farms are about 32 miles north of Gibeon, adjoining the line of the north to south railway. His Majesty's object in purchasing them is doubtless not only to give practical proof of his interest and confidence in the colony, but also to give a fillip to the wool-growing industry in Southwest Africa, from which great things are hoped. Considerable sums have been invested in the industry, although hitherto exports have been small. In recent years the industry has suffered by ravages of sheep pox among the flocks. The Emperor's brother-in-law, Prince Adolf von Schaumburg-Lippe, is interested in the wool-sheep syndicate which owns large stretches of land in the colony devoted to breeding merino sheep.

EDUCATIONAL PROGRESS IN PHILIPPINES.

[From the Manila Free Press.]

As a part of the industrial program of the Bureau of Education a new school will be established in Manila soon, to be known as the school of household industries of women. A recent act of the legislature has set aside \$50,000 for this school, which will begin its work by giving instruction in embroidery and lace making.

The catalogue of the school of arts and trades, which was issued recently, shows that the school has an enrollment of more than 500 pupils, and that there are nine courses in iron and wood work. The quality of work has risen steadily in all departments during the past year. Plans for the new building are nearly complete and work is about to start.

The Director of Education has received word from the United States that 234 teachers have passed the civil-service examination and are eligible to appointment in the Philippine service. Of this number 78 passed the assistant examination. Twenty-five new teachers are already on their way to the islands.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8833. Hosiery.**—An American forwarding firm has written the Bureau of Manufactures that it has an inquiry from one of the largest hosiery firms in an European country for American hosiery. The foreign inquirer is willing to buy against cash in large quantities. It is said that he has investigated the market, prefers American goods, and feels confident that he could work up a large trade in this line of merchandise.
- No. 8834. Electrical apparatus and domestic appliances.**—An American consul in the United Kingdom has forwarded a copy of a letter received from a business firm in his district relative to the opportunity for American manufacturers of certain lines of goods to secure sales in that country. This firm states it is very much interested in electric heating and cooking, and all domestic appliances, also in all kinds of electric advertising articles which can be brought into the British market and sold with great success, providing that the article is of good quality and at competitive prices. The firm has representatives in Ireland, England, Scotland, and Wales, and believes there would be no difficulty in pushing all the above articles, provided certain conditions are met. Copy of the complete letter, giving further details, will be sent to interested firms by the Bureau of Manufactures.
- No. 8835. Cotton.**—A business man in France having connections with spinning mills in that country informs an American consulate that he is desirous of entering into direct relations with some large cotton grower or broker in the United States for the purpose of selling bale cotton, as he wishes to operate independently of European commission agents. He believes that he can dispose of 40,000 to 50,000 bales of cotton a year. He states that he has ample references and can correspond in English. The consul is of the opinion that this is an excellent opportunity and hopes that some satisfactory arrangement can be made for simplifying the direct importation of raw cotton into that district.
- No. 8836. Alcohol.**—The Bureau of Manufactures is in receipt of a communication from an American business firm stating that it has an inquiry from the Levant for alcohol. The firm would like to have prices f. o. b. Smyrna. Any manufacturer interested in this trade is requested to communicate with this firm as soon as possible, as there appears to be a chance to get a part of the business this year owing to the prices charged for European alcohol.
- No. 8837. Shoes.**—An American consular officer in Italy reports that a firm in his district desires to secure the exclusive agency in a certain city for some large American manufacturer of men's, women's, and children's shoes. This firm has two large stores, is already handling American shoes which it purchases through a general agent in another city, and is in a position to market a considerable quantity. Correspondence should be in French or Italian. References can be furnished.
- No. 8838. Cotton goods.**—An American business firm writes the Bureau of Manufactures that it has an inquiry from its agents in the Near East for cotton goods in short pieces, from 1 to 5 yards and from 5 to 10 yards. The communication states that the inquirers are in a position to dispose of any quantity. Firms interested in this proposition should correspond with the American house, quoting prices f. o. b. Smyrna.
- No. 8839. Cottonseed hard soap.**—An American consul in the United Kingdom reports that several firms in his district have expressed a desire to communicate with American manufacturers of cottonseed hard soap for scouring purposes, with a view to importing the same. Communications regarding this matter should be submitted to the consulate forwarding the report.
- No. 8840. Shoes.**—A communication received by the Bureau of Manufactures states that an American firm has been advised by its agent in Turkey of calls for American shoes and wishes to communicate with a firm which is manufacturing a cheap grade of shoes for export. Prices should be quoted f. o. b. city of destination, and these, together with other communications, should be sent to the American firm referred to.

- No. 8841. Steel rails, fishplates, and rail rests.**—The American minister to Roumania in a cablegram reports that he has been informed by the American consul at Belgrade, Servia, that the Servian railway authorities are in the market for more than 14,000 tons of steel rails, also fishplates and rail rests for early delivery at Danube ports. It is said that the authorities would welcome American competition, and that an order satisfactorily filled would lead to others in the near future.
- No. 8842. Road construction.**—A report from the American legation at Tangier, Morocco, relative to the first allotment of a road from Casablanca to Marrakesh (Morocco City), was accompanied by specifications, notice of the award, etc. The award of this contract will be made publicly at Tangier on June 20, 1912. The total length of the road will be 1,700 meters, and the cost is estimated at \$4,760, not including \$645 for inspection and other sundry expenses. The specifications, etc., referred to can be obtained upon application to the Bureau of Manufactures.
- No. 8843. Cotton goods.**—A commission merchant of good repute in a foreign country and at present representing two large British firms informs an American consulate that he desires to represent a reliable American manufacturer of cotton goods similar to samples which he furnished and which can be obtained from the Bureau of Manufactures. This merchant systematically covers a large territory by traveling salesmen, and he particularly desires samples, prices, terms, etc., on goods of the widths marked on the samples submitted. While prices, widths, and qualities may be expressed in American terms, the correspondence should be in Portuguese, Spanish, or French. If this condition can not be met, persons interested may communicate with the inquirer in English, and the correspondence will be translated at the consulate in question.
- No. 8844. Glass marmalade jars.**—An American consular officer in Canada telegraphs that a business man in his district desires quotations on 1 to 5 gross lots, 3 to 3½ ounce individual glass serving marmalade jars. These jars should not have screw top. If obtainable, the inquirer will need five gross monthly. Bank references are furnished, and correspondence is desired at once.
- No. 8845. Bread-making machinery.**—An American minister reports that a Government official in the country in which he is located would like to receive communications from American manufacturers of machines used in bread making, for mixing flour and making the paste, not baking, such as are used in the United States Army. It is stated that a considerable number of small machines of this nature will soon be purchased.
- No. 8846. Leather, shoes, hardwoods, tires, and furniture.**—A report from an American consul in a Latin-American country contains the information that a merchant from that country is now in the United States with orders for American goods amounting to \$150,000, covering the following lines: Leather for shoe and carriage manufacture, fine shoes, hardwoods, carriage and automobile tires, medium and light drawing and dining room furniture, brass bedsteads, novelties, etc. This person is an American who has had four years' experience in the country in question and is now in the United States to get in touch with American interests looking for business. His address can be obtained from the Bureau of Manufactures.
- No. 8847. Electrification of Melbourne railways.**—The Agent General for Victoria, Melbourne Place, Strand, W. C., London, England, will receive tenders until June 4, 1912, for the electrification of the Melbourne Suburban Railways. The work is divided into the following sections: (1) Alternative direct-current system: (a) Turboalternators and transformers; (b) substation equipment; (c) electrical equipment of coaches. (2) Single-phase alternating current system: (a) Turboalternators and transformers; (b) substation equipment; (c) electrical equipment of coaches. (3) Common to both alternatives: (a) Boilers and boiler-house equipment; (b) condensing plant.
- No. 8848. Freight locomotives.**—The American minister at Bucharest, Roumania, reports that the "Direction des Chemins de Fer Roumains," Bucharest, will receive bids until June 7, 1912, for 32 locomotives for freight trains. Bids for these locomotives will be received in two lots, to be delivered within 12 months.

Six new monoplanes have been ordered by the British War Office, which will probably be adaptable as hydro-aeroplanes.

WAGES IN MANCHURIA.

[From Consul Albert W. Pontius, Dalny.]

In referring to conditions affecting Japanese artisans and laborers in Manchuria a Japanese economist states:

It is generally admitted that as the development of financial conditions tends to a decrease of the money rates of interest, the laboring wage synchronously receives an increase. In the Leased Territory (Dalny), however, this has not proved to be the case, a general decrease in the laboring wage being noted. The many minor speculative enterprises which appeared in the Leased Territory subsequent to the late war were in the main the chief factors contributing to the high average wage paid during the period of reconstruction.

Downward Trend of the Last Five Years.

This downward trend is shown in the following comparative table of average daily wages paid to Japanese and Chinese artisans and laborers in the Leased Territory during the years 1907-1911:

Trade.	1907		1908		1909		1910		1911	
	Japa- nese.	Chi- nese.	Japa- nese.	Chi- nese.	Japa- nese.	Chi- nese.	Japa- nese.	Chi- nese.	Japa- nese.	Chi- nese.
Blacksmith.....	\$1.25	\$0.60	\$0.75	\$0.40	\$0.75	\$0.40	\$1.00	.....	\$0.70	\$0.37
Bricklayer.....	1.25	.40	.75	.35	.85	.40	1.00	.....	.70	.17
Carpenter.....	.....	.....	.....	.....	.....	.....	1.00	.....	.70	.30
Coolie.....	.....	.20	.....	.15	.....	.15	.....	.....	.....	.16
Dye worker.....	.60	.30	.70	.....	.42	.....	.....	.....	.29	.....
Farm laborer.....	.....	.17	.....	.17	.....	.17	.....	.....	.....	.15
Joiner.....	.....	.....	.....	.....	.80	.35	.90	.....	.62	.35
Mat folder.....	1.50	.....	.75	.....	.70	.....	1.00	.....	.87	.....
Painter.....	1.25	.50	.60	.30	.90	.35	.75	.....	.75	.35
Plasterer.....	.....	.....	.....	.....	.....	.....	1.00	.....	.95	.37
Printer.....	.50	.20	.50	.25	.75	.25	.....	.....	.62	.22
Sailor.....	.80	.42	.60	.44	.50	.25	.60	.....	.45	.35
Sawyer.....	1.25	.40	.90	.30	.80	.35	1.00	.....	.57	.27
Steel laborer.....	.50	.20	.60	.16	.60	.27	.65	.....	.57	.17
Stevadore.....	.75	.27	.60	.....	.50	.25	.60	.....	.....	.....
Stone cutter.....	.....	.....	.....	.....	.....	.....	1.10	.....	1.07	.50
Tailor.....	.75	.....	1.00	.50	.90	.....	.....	.....	.75	.35
Tinsmith.....	1.25	.40	.60	.40	.75	.30	.85	.....	.90	.37

As will be noted from the figures, a gradual decrease in the laboring wage paid both Japanese and Chinese has been evidenced in recent years. Still, in comparison with the conditions obtaining in Japan and China, a much higher rate of wage will continue to be paid in the Leased Territory for some time to come.

Japanese versus Chinese Labor.

It will also be noted that the Chinese coolie labor experiences no competition whatever from the Japanese. The latter in every instance pursues an avocation a grade or two above the Chinese artisan or laborer, hence the marked disparity between the comparative wage paid, and the elimination from the field of the ordinary Japanese coolie.

To a student familiar with wage conditions in China and Japan, it is at once apparent that the artificial wage paid to the Japanese artisan and laborer in the Leased Territory is certain to show a still further decrease, and that a normal state is likely to prevail as soon as the agricultural wealth of the district is sufficiently developed to cause a corresponding decrease in the cost of living.

DAILY CONSULAR AND TRADE REPORTS

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COMMERCIAL REVIEW OF UNITED KINGDOM.

[By Consul General John L. Griffiths, London; supplementing preliminary report in Daily Consular and Trade Reports for Feb. 1 and 16, 1912.]

The prosperity in the trade and commerce of the United Kingdom which was so marked in 1910 continued throughout 1911, although the percentage of gain was naturally smaller, as the increase in the volume of British imports and exports in 1910 was unprecedented.

There was a gain in the imports for seven months of the year as compared with 1910, and a falling off in April, May, June, August, and December, while the exports showed a gain in all the months excepting July, August, and September, which were the three months when the labor troubles were most acute, especially those affecting the railways and steamship lines.

Effect of Labor Troubles on Business.

Notwithstanding the satisfactory total of foreign trade in 1911, the year, and especially the second half of it, was one of great apprehension and anxiety in consequence of the grave labor disturbances which prevailed over large areas, affected great masses of workers, and temporarily disorganized several of the most important industries of the country. The closing days of the year witnessed the inauguration of the cotton strike, since temporarily adjusted at least, and the threat of a coal strike throughout the Kingdom. There was also a strike, fortunately of short duration, in the woolen industry. During July and August the men engaged in the transportation services of the United Kingdom were on strike, which was accompanied by violence and bloodshed in certain localities, causing serious loss to the manufacturers and to dealers in perishable fruits and produce and inconveniencing everybody through the scarcity of supplies and their excessive cost. There was a renewal of the railroad strike in Ireland, which lasted from September 15 to October 4, and in which the strikers were unsuccessful. Prior to the railway trouble the seamen were on strike at the various English ports, and early in July it extended to the carters and dockers. London was not affected until August 1, but by August 7 all the riverside workers and most of the carmen

joined the strikers. For a few days the food supply of London was at the lowest ebb. Settlement was effected August 11.

The hopeful signs of the year included the activity in shipbuilding, the satisfactory railway receipts, notwithstanding the labor complications which greatly reduced earnings, the improved conditions of the iron and steel and the motor-car and motor-cycle industries, and of the woolen and worsted industries for the first six months of the year, the amount of new capitalizations, and the absence of stringency in the money market, and to the decrease in unemployment.

Extending the Markets for Home Products—Foreign Trade.

Efforts to popularize British manufactures at home and abroad were even more aggressive in 1911 than in the previous year, and the result was the "all-British shopping week," the renewed demand for an imperial trade-mark, the endeavor to bring the chambers of commerce throughout the country into closer affiliation, and the establishment of schools for commercial travelers.

Although the foreign trade of some countries has increased in recent years more rapidly than that of the United Kingdom, still its commerce has so expanded that the aggregate in 1911 was \$1,620,955,063 more than in 1901. The following table shows the total value of the imports, exports, and reexports of the United Kingdom for the past six years:

Years.	Imports.	Exports.	Reexports.
1906.....	\$2,958,239,385	\$1,827,737,382	\$414,151,219
1907.....	3,143,292,672	2,073,299,731	447,436,152
1908.....	2,886,519,328	1,835,739,081	373,093,089
1909.....	3,042,342,740	1,841,383,564	444,630,994
1910.....	3,300,737,807	2,095,465,317	505,026,410
1911.....	3,311,941,224	2,210,765,691	499,890,768

There was an increase in the imports into the United Kingdom in 1911 over 1910 of \$10,116,865, and an increase in the exports of \$115,300,275, but the reexports were less in 1911 than in 1910 by \$5,135,642.

Review of Gains and Losses in Foodstuffs.

The principal items contributing to the increased imports were food and drink and tobacco, which showed a gain of \$32,374,820, and manufactured articles a gain of \$42,500,741. There was a falling off, however, in the imports of raw materials and articles mainly manufactured of \$64,000,000. Of the gain of \$32,374,820 in the imports of food, drink, and tobacco, \$25,578,017 is credited to food and drink, of which \$10,929,594 represented the gain in sugar. The receipts of refined sugar from Russia advanced 2,100,000 hundredweight over 1910 and from Germany 650,000 hundredweight, while 1,000,000 hundredweight less were received from France. [Whenever the ton is mentioned in this report it is the long ton of 2,240 pounds, and the hundredweight of 112 pounds.] The receipts of unrefined sugar from Germany were 3,694,400 hundredweight greater and from Java 1,100,000 hundredweight greater than for 1910, while those from Cuba fell off 1,800,000 hundredweight and from Haiti nearly 1,000,000 hundredweight. The imports of tea increased in quantity by 16,222,000 pounds and in value by \$8,180,586.

The imports of flour decreased in value by \$7,472,647, notwithstanding an increase in quantity of 1,000,000 hundredweight. The decline in the imports of wheat was 7,113,543 hundredweight and in value \$25,467,380. There was a noticeable falling off in the receipts of wheat from Russia of 10,835,000 hundredweight, with increases from India, the United States, and Roumania. The quantity of wheat meal and flour imported showed a gain against 1910, but a falling off in value of \$1,138,089. Barley imports increased by 6,222,620 hundredweight, Turkey sending nearly 2,000,000 hundredweight more than in 1910. The receipts of rice were lower by more than 1,000,000 hundredweight than in the previous year. There was an increase in the amount of fresh beef received of 357,000 hundredweight, but a decline of 69,000 hundredweight in fresh mutton. The value of the meat imports, including animals for food, increased \$4,176,090. Butter imports increased \$528,799 in value, but decreased 22,583 hundredweight in quantity. Cheese showed an increase of \$1,606,266 in value, but a falling off in quantity of 118,018 hundredweight. The imports of eggs increased in value by \$3,257,947 and in quantity by 713,758 great hundreds (great hundred = 120). There was an increase in the value of unmanufactured tobacco of \$2,846,114.

Status of Raw and Manufactured Goods Imported.

Under raw materials and articles mainly manufactured the import of iron ore declined by 674,031 tons in quantity and \$1,999,265 in value. Raw cotton fell off in value by \$2,707,691, while sheep's wool showed a decline in quantity of 2,327,093 pounds and in value of \$3,941,451. There was an increase of 4,236 tons in the imports of jute and \$6,452,473 in its value; a shrinkage of 8,321 tons in the receipts of flax, but an increase in value of \$668,175; a gain of 10,572 tons in hemp and \$757,865 in value. Rubber showed a gain of 29,108 hundredweight in the quantity imported, but an extraordinary falling off in value of \$37,780,284, which represented nearly a 30 per cent decline.

In articles wholly or mainly manufactured there was an advance in the value of imports of iron and steel aggregating \$10,015,242; of machinery, \$6,318,547; and of metal manufactures other than iron and steel, \$14,078,580. The higher price of tin accounted for an advance in value of more than \$7,299,750 in the foregoing items. Cotton yarns and textiles advanced in value \$1,971,772, while there was a decline in other textiles. The imports of hats and bonnets increased, but those of boots and shoes decreased. The imports of chemicals advanced in value by \$2,086,025 and motor cars and parts thereof by \$4,187,178.

Principal Exports and Reexports.

There was a general advance in the values of the exports of the produce and manufactures of the United Kingdom. Articles wholly or mainly manufactured accounted for 81.7 per cent of the total increase; food, drink, and tobacco for 12.4 per cent; miscellaneous and unclassified articles for 4.2 per cent; and raw materials for 1.7 per cent. Cotton goods accounted for \$69,092,241 of the increase in manufactured articles; machinery, \$8,302,361; chemicals, \$7,421,403; apparel, \$5,368,854; cutlery, etc., \$4,738,579; iron and steel, \$3,771,280; motor cars and parts thereof, \$2,823,495; earthen and

glass ware, \$1,761,133; railway carriages, etc., \$3,381,488, leather, etc., \$946,276; and paper, \$920,586.

The principal increase in the exports of food and drink was in fish, which advanced in value \$5,810,611, beer and ale, \$783,202, and spirits, \$1,529,662. The exports of coal, coke, and manufactured fuel showed a gain of 2,756,526 tons in quantity and \$3,085,337 in value; bunker coal decreased 261,546 tons.

A falling off in the reexports of foreign and colonial merchandise in 1911 as compared with 1910 was confined practically to raw materials, which declined in value by \$16,566,349, to which wool contributed \$7,254,443. The reexports of food, drink, and tobacco advanced in value by \$6,993,647, and articles wholly or mainly manufactured by \$4,945,975.

Trade by Countries.

The following table shows the total imports into the United Kingdom from foreign countries and British possessions and the exports of the produce and manufactures of the Kingdom to foreign countries and British possessions during 1910 and 1911:

Countries.	Imports from.		Exports to.	
	1910	1911	1910	1911
FOREIGN.				
United States and possessions.....	\$580,512,384	\$606,112,871	\$159,627,030	\$139,466,184
Argentina.....	140,823,744	132,819,365	92,889,083	90,596,307
Austria-Hungary.....	36,577,883	33,659,498	19,445,541	22,505,504
Belgium.....	94,218,325	101,313,795	52,880,007	55,362,613
Bolivia.....	6,982,545	7,720,104	1,179,016	1,584,994
Brazil.....	85,192,002	52,757,272	79,996,462	58,048,799
Bulgaria.....	6,679,129	1,543,099	3,444,455	4,585,975
Central American States.....	6,402,300	9,589,021	4,583,077	7,346,000
Panama.....	145,425	108,068	1,950,010	2,281,215
Chile.....	25,337,183	21,159,045	26,589,021	29,931,939
China (exclusive of Hongkong, Macao, and Wei-hai-wei).....	26,912,377	23,837,592	44,644,498	59,124,227
Colombia.....	5,074,012	5,119,436	5,822,806	5,207,273
Cuba.....	12,985,944	6,311,850	9,350,502	10,815,110
Denmark and possessions.....	96,352,947	101,344,949	27,397,329	26,814,889
Ecuador.....	2,947,336	2,888,968	1,468,768	2,837,404
Egypt.....	102,220,107	104,567,050	42,438,420	50,225,377
France and possessions.....	229,585,278	216,098,090	122,867,022	131,768,736
Germany and possessions.....	303,032,357	320,097,229	182,177,140	194,678,327
Greece.....	10,957,542	11,268,455	7,520,236	8,397,228
Haiti and Santo Domingo.....	5,761,580	2,514,501	1,900,000	2,039,392
Italy and possessions.....	31,446,858	33,831,304	61,206,095	64,791,568
Japan and possessions.....	21,054,513	16,487,439	49,201,755	58,773,786
Kongo Free State.....	259,953	174,663	692,054	1,235,755
Mexico.....	11,186,832	10,032,797	11,667,798	11,217,049
Morocco.....	2,833,587	3,976,314	4,168,468	5,732,445
Netherlands and possessions.....	111,350,366	119,775,544	82,256,279	91,093,157
Norway.....	32,270,095	30,457,199	19,035,169	23,610,579
Persia.....	2,190,445	3,371,599	3,633,017	4,009,178
Peru.....	17,949,354	15,339,161	6,419,370	6,752,234
Portugal and possessions.....	18,150,009	16,572,688	32,136,626	26,584,273
Roumania.....	15,498,044	32,095,219	8,890,901	13,097,978
Russia.....	212,413,327	209,919,353	60,368,601	65,901,617
Serbia.....	750,023	191,589	1,058,177	1,552,180
Siam.....	3,844,154	(1)	3,247,751	5,028,486
Spain and possessions.....	74,586,170	73,885,038	31,091,907	34,477,099
Sweden.....	57,588,248	58,235,440	32,598,537	30,927,483
Switzerland.....	46,968,878	48,842,277	16,423,941	19,127,579
Tripoli.....	845,129	521,912	571,400	652,673
Tunis.....	2,604,306	4,481,268	2,153,883	2,292,919
Turkey in Asia.....	15,793,023	21,129,856	24,666,711	28,425,859
Turkey in Europe, and Crete.....	6,931,593	5,693,589	17,352,615	17,598,792
Uruguay.....	8,483,024	6,978,483	14,333,988	14,073,587
Venezuela.....	2,867,248	3,476,078	3,914,710	5,340,234
All other countries.....	861,427	966,849	2,075,514	1,361,085
Total.....	2,471,429,762	2,478,010,100	1,378,541,399	1,437,864,178

¹ Not given.

Countries.	Imports from.		Exports to.	
	1910	1911	1910	1911
BRITISH POSSESSIONS.				
Channel Islands.....	\$7,754,334	\$8,463,539	\$6,247,047	\$6,258,898
Gibraltar, Malta, and Gozo.....	299,742	333,973	6,883,654	7,143,894
Cyprus.....	931,667	903,918	507,152	607,200
West Africa:				
Gambia and Sierra Leone.....	1,218,182	1,374,274	3,345,236	3,458,621
Gold Coast.....	5,185,873	4,339,209	8,147,640	8,041,716
The colony and protectorate of Southern Nigeria.....	15,743,350	13,610,228	13,143,642	13,657,374
South Africa:				
Cape of Good Hope.....	137,644,722	135,594,812	39,314,049	41,137,668
Natal.....	10,133,595	10,186,392	24,842,256	22,101,054
Orange River Colony.....	3,265	4,258	2,543,398	2,673,669
Rhodesia.....	(²)	866,641		5,127,616
Transvaal.....	2,215,133	1,472,114	28,189,269	32,368,079
East Africa:				
Zanzibar and Pemba.....	586,111	726,938	383,694	398,741
East Africa Protectorate.....	1,740,713	1,186,988	1,672,338	2,419,341
Nyasaland Protectorate.....	464,604	706,265	423,341	457,923
Mauritius and dependencies.....	3,283,919	4,594,307	2,686,527	2,656,544
Aden and dependencies.....	1,429,811	1,313,556	1,644,716	1,752,713
British India.....	208,353,420	221,159,932	223,874,309	254,477,421
Straits Settlements and dependencies, including Labuan.....	56,378,480	62,796,075	20,097,433	21,433,769
Federated Malay States.....	7,353,802	8,226,185	2,116,090	2,998,781
Ceylon and dependencies.....	29,127,983	32,898,289	11,297,716	12,275,507
Hongkong.....	2,903,251	3,577,364	17,596,660	13,513,487
Australia.....	188,121,281	190,258,771	134,468,283	149,949,381
New Zealand.....	101,913,746	86,875,780	41,991,206	47,777,939
Canada.....	124,781,011	119,694,263	95,785,776	95,927,178
Newfoundland and Coast of Labrador.....	2,933,385	3,501,724	4,686,867	2,881,795
British West India Islands.....	11,303,312	9,231,694	11,534,047	12,777,001
British Guiana.....	3,783,684	2,939,872	2,850,080	3,421,911
Falkland Islands.....	1,708,438	3,063,836	464,575	501,926
All other possessions.....	2,011,231	4,030,027	9,189,002	4,641,601
Total.....	829,308,045	833,931,124	715,926,093	772,901,413
Grand total.....	3,300,737,807	3,311,941,224	2,094,467,492	2,210,765,591

¹ Exclusive of the value of diamonds.² Not given.**Conditions in the Money Market.**

Only four times during 1911 was the bank rate changed, and it did not exceed 4 per cent at any time. During 1910, however, it changed nine times. The average bank rate in 1911 was $3\frac{1}{2}$ per cent as compared with $3\frac{1}{10}$ per cent for 1910. The year opened with the Bank of England's rate at $4\frac{1}{2}$ per cent, at which it had been placed on November 30, 1910. It was reduced to 4 per cent on January 26, 1911, to $3\frac{1}{2}$ per cent on February 16, and to 3 per cent on March 9, at which rate it remained until September 21, when it was increased to 4 per cent.

The deposit and current accounts of the leading banks which issue monthly balance sheets showed on December 31, 1911, a total of about \$2,457,582,500, which was an increase of about \$87,597,000 during the year. There were no important acquisitions or amalgamations in 1911. Two banks of some importance suspended payment during the year.

The stock of bullion of the Bank of England, which was \$152,593,974 on December 28, 1910, was \$157,859,527 on December 27, 1911. This gain of \$5,265,553 almost made up for the loss of \$6,195,054 which was sustained in 1910.

Imports and Exports of Gold—Mint Output—Clearing-House Returns.

The imports of gold into the United Kingdom during 1911 aggregated \$236,969,351, against \$278,957,513 in 1910, while the exports

amounted to \$195,157,516 compared with \$247,695,117. The net total received from the Transvaal was \$165,947,650, being the highest total ever received from that country. The price of bar gold remained at the statutory price of \$18.92 throughout the entire year, with the exception of a few days in January.

There were sovereigns and half sovereigns valued at \$161,240,909, against \$123,122,450 for 1910, issued at the royal mint, and \$11,436,275 against \$13,139,550 withdrawn. The silver coins issued last year were valued at \$10,788,526, against \$12,266,455, and those withdrawn amounted to \$2,827,937 and \$2,748,393, respectively.

The clearing-house returns, which were unusually high during 1910, decreased last year. The amounts cleared at the London Bankers' Clearing House were \$71,118,432,420, compared with \$71,337,356,789 for 1910. The large turnover in 1910 was due to "the heavy borrowings on treasury bills in consequence of the postponement of the budget of 1909-10, the unprecedented issue of new foreign loans, and the increased capital for commercial undertakings, together with the rubber boom."

Conditions of the Stock Market.

The new issues in 1911 amounted to \$1,167,002,759, against \$1,631,523,323 for 1910, of which \$313,202,587 represented public loans, against \$697,583,089 for the preceding year. The total number of public loans (State and municipal) in 1911 was 57, against 64 in 1910, of which 37 were for municipal purposes. The bill issues amounted to \$160,594,500 and \$325,768,376 for 1911 and 1910, respectively.

The noticeable features of the stock market in 1911 were the large number of Canadian undertakings which were successfully financed, the liquidation of many rubber companies and skating-rink properties, the absence of any special activity, so marked in 1910, in oil shares, and the greatly increased price of certain industrial stocks. It was, however, a much steadier, healthier, and more normal year than its predecessor.

The Shipbuilding Industry.

Notwithstanding the increase in wages and in the cost of material, and occasional labor troubles, the year 1911 was one of continuous and exceptional activity in the shipbuilding yards of the United Kingdom. The improvement in freight rates caused the building of a great number of cargo boats, and the feature of the year was the construction of moderate-sized vessels designed to carry both cargo and passengers or cargo alone.

Of the 1,478 vessels of 2,080,397 tons built in the United Kingdom last year for the merchant marine, 897 vessels of 1,221,948 tons represented the output of the English yards, 557 vessels of 671,624 tons the output of the Scotch yards, and 24 vessels of 186,825 tons the output of the Irish yards.

Of the tonnage added to the register of the United Kingdom in 1911 about 92½ per cent consisted of new vessels, practically all of which were built in the United Kingdom. The vessels which were bought from foreign countries represented 82,757 tons. There was a gross deduction from the register of 1,018,034 tons, to which sailing vessels contributed 163,551 tons and steam vessels 854,483 tons. A

little less than one-quarter of the steam tonnage, and nearly 26½ per cent of the sailing tonnage which was removed from the register was on account of loss, breaking up, dismantling, etc. The tonnage sold by British shipbuilders to foreign owners in 1911 aggregated 730,485 tons, of which Norway acquired 155,393 tons, Greece 108,385 tons, Japan 88,352 tons, Italy 79,114 tons, Germany 42,247 tons, Turkey 34,657 tons, Netherlands 33,180 tons, Sweden 32,373 tons, and France 30,732 tons. The vessels, as a rule, were not of recent construction.

Vessels of Special Design Constructed and Other Shipping Particulars.

A larger number than usual of vessels of special design were built in 1911. They included 24 steamers built on the longitudinal system of construction, with a total tonnage of 109,113 tons, including 3 for the Great Lakes of America, and 1 on the topside tank system; 6 vessels fitted for burning liquid oil; 5 steamers of the cantilever framing and topside tanks type; 1 steamer fitted with steam turbines; 2 steamers with a combination of turbines and reciprocating engines; and 1 steamer with engines worked from a suction-gas plant and with screw shaft connected by a hydraulic transformer.

During 1911 six warships were in course of construction at various British shipyards for foreign powers, with an aggregate displacement of 60,550 tons. There were launched for the British Navy 5 battle-ships, 1 battle cruiser, 3 protected cruisers, 2 unarmored cruisers, 26 destroyers, and 6 submarines. [Additional statistics on the output of British and foreign shipyards and other shipping information appeared in the Daily Consular and Trade Reports for Feb. 1 and Apr. 10, 1912.]

The number of steam vessels on the register of the United Kingdom at the close of last year was 12,244 of 17,743,737 gross tons, and 8,836 sailing vessels of 1,063,375 gross tons.

Of the 234,148 seamen (excluding fishermen) employed on British vessels for the year ended June 30, 1911, 163,303 were British, 43,004 Lascars, and 27,841 foreigners. The number of deaths by injury was 1,233, or 1 in 190, against 1,223, or 1 in 192, for the previous year. The deaths by injury on sailing vessels were 234, or 1 in 75, against 1 in 90 for the year 1909-10. The number of deaths by disease on both steam and sailing vessels was 1 in 341, against 1 in 260 for the previous year. Of the 217 fishermen who lost their lives, death was due in 193 cases to injury.

Shipments and Output of Iron and Steel.

The relation between the shipbuilding and the iron and steel industries is necessarily close, and the activity in the British shipyards in 1911 was reflected in the iron and steel trades. The exports of iron and steel from the United Kingdom in 1911 aggregated 4,519,109 tons, as compared with 4,588,009 tons in 1910 and 4,210,799 tons in 1909. There were large shipments of boiler plates to the Continent and South America, but the shipments of steel to Canada were not as large as were anticipated, because of the heavy purchases made by that country in the United States.

The total output of pig iron in the United Kingdom in 1911 is estimated as less than 9,500,000 tons. The output of the Scotch furnaces in 1911 was 1,401,799 tons, as compared with 1,414,461 tons in 1910; the Cumberland furnaces 946,687 tons, against 1,133,500

tons; and the Cleveland mines, which practically feed the furnaces of the northeast of England, 6,250,000 tons, as compared with 6,152,823 tons.

The following table shows the exports in quantities and values of iron and steel produced in the United Kingdom for 1910 and 1911:

Articles.	1910		1911	
	Tons.	Value.	Tons.	Value.
Pig iron.....	1,205,444	\$19,994,283	1,204,315	\$18,758,430
Railway material.....	807,537	18,191,580	493,876	15,517,565
Plates and sheets.....	847,474	47,305,319	885,248	49,589,344
Wrought tubes and fittings.....	168,002	12,281,922	178,478	13,148,262
Tin plates and sheets.....	482,981	31,851,260	484,355	33,308,069
Girders and joists.....	128,232	4,496,465	119,567	4,312,147
All other.....	1,148,339	75,035,010	1,158,270	78,297,852
Total.....	4,588,009	209,145,969	4,519,100	212,917,249

Liability of Steel to Oxidization.

One of the leading publications analyzing the iron and steel trade for 1911 said in part:

The belief in the greater liability to oxidization possessed by steel has been strengthened and seems to have taken hold of the minds of constructors. It may perhaps be doubted whether the movement will be of long duration, but it is very welcome to iron manufacturers who have felt that their branch of the industry was gradually slipping away from them. If it can be proved satisfactorily, for instance, that wrought-iron bolts are in less danger from rust than steel bolts there is no doubt that constructional engineers will use them almost exclusively, even at a slightly higher price, because the cost of the bolts and nuts in a piece of constructional engineering can not in any case be of serious moment. Wrought-iron bolts used with steel plates and angles may not prove so satisfactory as the same bolts used with iron plates and angles from the point of view of oxidization. The result of the greater appreciation of iron as a constructional material is to be seen in the improvement which has taken place in Lancashire bar-iron prices, while during the same period steel prices have not moved much.

There was a large business done in manufactured steel during 1911; in fact, it is generally stated by steel merchants that the volume of trade was greater than for some years, and the steel works were well supplied with orders throughout the year.

Limited Demands for Locomotives.

The depression in the locomotive trade, which was so marked in 1910, continued throughout last year. At the end of September there were 22,503 men employed in the industry as compared with 20,274 in 1910, 21,144 in 1909, 22,915 in 1908, and 24,450 in 1907. The locomotive trade depends far less on the home than it does on foreign markets. The demand from India, upon which trade the prosperity of the British locomotive industry is largely dependent, was not satisfactory during the year, orders for one to five locomotives being the rule.

The South American demands did not fulfill expectations, and to the small demands of both India and South America the depression of the year may be principally attributed. There was an increase in the colonial requirements, and it is believed that there will be a steady demand from this source for a long time to come. Only comparatively few orders were received from the Continent, and there was a limited demand from Japan and China. It is thought that within a short time, however, the Chinese market, in view of the railway developments that must take place in that country, will furnish a large outlet for British locomotive builders.

Increased Shipments of Tin—Galvanized Iron.

Although not many years ago the activity of the Welsh tin-plate industry depended in great measure upon the American demand, and that demand has become almost a negligible quantity, and there has been a great falling off in the exports to Canada, nevertheless the aggregate exports in 1911 were the largest in the history of the trade. It is realized that the competition is becoming keener each year. Many new mills were built in 1911, not only in England, but in other countries. Fortunately the demand kept pace with the increasing supply, but how long this will continue is, of course, problematical. The total exports of tinned plates and tinned sheets in 1911 from the United Kingdom aggregated 484,355 tons, valued at \$31,660,404, as compared with 482,972 tons, valued at \$25,416,556, in 1910. The increase was only 1,383 tons, but omitting Canada and the United States the increase to the remaining countries was 74,311 tons. The exports to the United States were only 13,997 tons in 1911 as compared with 73,619 tons in 1910, and to Canada 14,428 tons compared with 25,741 tons.

There were 525 tin-plate mills in the United Kingdom at the close of 1911 as compared with 450 at the close of the previous year. The average price of tin plate was about 12 cents per box more than in 1910. This was due, however, to the higher prices which prevailed in the earlier part of the year and which quickly declined. Tin plate sold at \$3.46 per box in January, in September at \$3.31 to \$3.28, and in November at \$3.22. The average price for tin throughout the year was \$184.92 per ton higher than in 1910, and with the slight advance in the wages paid to the tin-plate workers the profits of the industry were not exceptionally large.

The London Times commented on the trade in galvanized iron as follows:

The demand for galvanized iron continued good throughout the year and although it was feared at the commencement that the enlarged output might not be absorbed, the increasing requirements of the overseas markets proved equal to it and the total shipments showed an increase of 20,608 tons as compared with 1910. India was again the best customer and took 10 per cent more than in the previous year. The Australian colonies came second with an increase of 8 per cent, while the demands from Argentina fell off 20 per cent compared with the previous year. Prices did not show a great variation during the year and after receding \$3.64 per ton recovered to about the same extent, so that the quotations at the end of 1911 about equaled those at which the year began.

The Copper Situation.

It was not until the closing months of 1911 that any upward trend was shown in copper. This was due to a great reduction in the visible supply, both in America and Europe. On December 15, cash copper rose to \$299.89 a ton, making a net rise during the year of about \$26.76 per ton. The European visible supply, which on January 1, 1911, aggregated 83,797 tons, decreased by the middle of December to 56,569 tons. The combined visible supplies in Europe and America at the middle of December, 1911, was 106,473 tons as against 138,275 tons at the close of the preceding year. In addition to the foregoing supplies there were 13,400 tons in Hamburg and Rotterdam, the stocks in those cities having declined during the year by about 9,000 tons. The feature of the copper market in 1911 was that nearly every nation increased its imports from the United States. The greatest advance in the consumption of copper during 1911 was in

France, the increase being from 65,500 in 1910 to 80,800 tons in 1911; and in Germany from 117,200 tons to 135,500 tons. The consumption in the United Kingdom in 1911 was 97,200 tons, against 96,300 tons in 1910. The copper situation was more favorable at the end of 1911 than it had been at any time during the year.

Increased Shipments and Output of Coal Notwithstanding Labor Conditions.

Notwithstanding the feverish condition of labor in the mining districts of the United Kingdom, especially in the South Wales territory, during almost the whole of 1911 the British coal trade showed an improvement over 1910. The quantity of coal shipped abroad in cargoes aggregated 64,599,266 tons in 1911 as compared with 62,085,476 tons in 1910. The output of the coal mines in the United Kingdom for last year is estimated at 271,878,924 tons. [Statistics showing the shipments of coal by countries were published in the Daily Consular and Trade Reports for Feb. 1, 1912.]

The London Times, commenting on the coal situation, said:

One of the principal features of the year was the large orders received in consequence of the war between Italy and Turkey. Up to that time the exports were smaller than for several years. There was a noticeable gain in the shipments to France and Egypt, South America, and Russia. The prices of coal during the greater part of the year were steady and normal, but as the labor situation grew more intense prices advanced, and coal that sold in January at \$4.50 per ton commanded \$5.22 in December. The average rise in the price of Newcastle coals was 36 to 48 cents per ton and for Cardiff coals 18 to 30 cents per ton.

Prices and Supplies of Cotton.

The most significant feature of the cotton industry last year was the great decline in its price at the end compared with the beginning of the year. The highest quotation of middling American in January was 16.22 cents; in May, 16.84 cents; in September, 14.64 cents and in December, 10.22 cents.

The visible supplies of the different varieties of cotton on December 30, 1910 and 1911, respectively, were as follows: American, 4,198,790 and 4,690,970 bales; East Indian, 188,060 and 60,960 bales; Egyptian, 440,420 and 377,880 bales; and other cotton, 52,260 and 66,810 bales, making a total of 5,196,620 bales at the end of 1911, compared with 4,879,530 for the same period the preceding year.

The development of cotton growing in some of the British overseas possessions was marked during last year and shows the persistent attention paid to the possibilities of British-grown cotton in anticipation of the time when the shipments of cotton from the United States will be greatly reduced owing to the increased American consumption. The council of the British Cotton-Growing Association sent a deputation to Egypt last winter to inquire into the possibilities of extending the cultivation of cotton in the Anglo-Egyptian Sudan. The association is allowed an annual grant of \$48,665 from the British Government, and for eight years has been actively engaged in the establishment of new cotton-growing fields in different parts of the British Empire and more particularly in Uganda, which country has been steadily increasing its output, being 16,000 bales of 400 pounds each for 1911 against 10,000 for the preceding year. The output in the West Indies increased from 6,000 bales in 1910 to 7,000 bales in 1911. Nyasaland increased its output from 5,000 bales

to 6,000 bales, and the output in the Sudan, being the first statistics available, was 12,600 bales.

A large cotton acreage was purchased in Mississippi last year by the British Fine Spinners' Association, and it is thought that this may develop into a growing desire on the part of British spinners to acquire more of the sources of supply.

The Egyptian Crop—The World's Spindles.

Last year's Egyptian crop was larger than the average. The estimated total for 1911 was 6,500,000 cantars (cantar=99.05 pounds). Although this was less than the 1910-11 crop, which aggregated 7,573,537 cantars, it surpassed that of 1909-10 and approached nearly to the production of 1908-9.

The total number of cotton spindles in the world at the end of 1911 was estimated at 137,278,752, compared with 133,384,794 for the end of 1910. The number of spindles in the United Kingdom at the end of 1911 was 54,522,554; United States, 28,872,000; Germany, 10,480,090; Russia, 8,671,664; France, 7,300,000; India, 6,250,000; Austria, 4,563,745; Italy, 4,582,065; and Japan, 2,131,494.

Large Increase in Exports of Cotton Piece Goods.

Of the \$69,092,241 increase in the value of the exports of cotton goods last year compared with the previous one, piece goods represented a gain of \$57,559,263. There was an increase in the cotton piece goods exports from Great Britain in 1911 to China, Turkey, Germany, Switzerland, Madras, Bengal, Burma, Egypt, Venezuela, Bombay, Dutch East Indies, and Central America amounting to 755,000,000 yards. The exports, however, diminished to the Philippine Islands, Colombia and Panama, Belgium, France, Portugal, Argentina, British West Africa, British South Africa, Canada, Japan, and the United States to the extent of 90,000,000 yards, leaving the net increase of the year at 665,000,000 yards. India took 207,500,000 yards more in 1911 than in 1910, China 176,000,000 yards more, Turkey 63,000,000 yards more, and Egypt 40,000,000 yards more. The exports of cotton yarn increased in quantity in 1911 by 32,228,500 pounds and in value by \$11,324,145. [The shipments of British piece goods by countries during 1911 were published in the Daily Consular and Trade Reports for Feb. 1, 1912.]

Prospects for Present Year.

In its annual trade review of the cotton trade for 1911, the London Chamber of Commerce, regarding the prospects for 1912, stated:

The year 1912 began with spinners and manufacturers fairly deeply sold at profitable rates, and whatever may happen later on the first six months is bound to be a busy and profitable period. With matters more settled in China and the Near East, there is no reason to doubt but that British shipments in piece goods will make a further leap forward, as there was never a time when the prospects were so healthy in India. Manufacturers are in a strong enough position to hold for remunerative prices, and in weaving the outlook is healthy. There is a little uncertainty with regard to the future in spinning. Producers had a good time during the last months of 1911. A great deal depends upon the offtake in export descriptions, but the comparatively low prices in raw cotton should do much to help spinners maintain their position. The most favorable feature is that large supplies of American cotton will be available throughout the year at lower prices than for a long time past. The Egyptian crop may only be a moderate one, but should be about sufficient to meet the demands of users. On the whole, the year 1912 began under favorable conditions.

There was very little labor disturbance in the cotton trade of the United Kingdom until the close of 1911, when the weavers demanded that no one be employed who was not a member of the weavers' trade-union organization, and an increase in wages was demanded. December 27 a lockout was inaugurated which affected 160,000 cotton operatives. After the mills had remained closed for about three weeks the British Board of Trade intervened and a settlement for a time was effected.

Conditions in the woolen trade were favorable up to June, when a strike of three weeks' duration occurred in the wool-combing industry of Bradford. Political disturbances in Europe and China, the harvest failure in Russia, and other factors caused adverse influences. There was very little decline in the prices, however, and the year closed firm.

Imports of Wool and the Trade in Woolen and Worsted Goods.

There was an increase of 115,000 bales in the imports of Australasian and Cape wool as compared with 1910, bringing the total up to 2,898,000 bales. The increase in the home absorption over 1910 was 78,000 bales and in the Continental 110,000 bales, while the American demand fell off by 73,000 bales. It is stated that the manufacturers of worsted goods had, on the whole, a fairly good year. The feature of the year was the predominance of woollens over worsteds, for while the exports of woollens were the largest in the history of the trade, the quantity of worsted tissues exported was the lowest with the exception of 1908. The "hobble" skirt is held to have been accountable for a serious falling off in the consumption of dress goods, while the unusually hot and rainless summer caused a widespread use of thin fabrics. The exports to the United States from the Bradford district, the center of the woolen industry of Great Britain, were the lowest since 1903. In consequence of the small woolen imports into the United States in the past two years the stocks of all kinds of textiles in that country must be so reduced as to necessitate large orders in 1912.

Decreased Imports but Increased Exports of Shoes.

There was a falling off of 186,720 pairs and \$111,890 in value in the imports of all kinds of boots and shoes to the United Kingdom last year compared with the previous one, while the shipments out of the country increased 482,832 pairs and in value \$1,427,105. The total imports of boots and shoes made of leather last year were 169,617 dozen pairs valued at \$3,245,022, against 168,236 dozen pairs valued at \$3,278,434 for 1910. Shoes made principally of rubber were imported to the number of 119,253 dozen pairs valued at \$796,290, compared with 158,024 dozen pairs and a value of \$944,632 for 1910. The imports of shoes made of other material than leather or rubber amounted to 115,720 dozen pairs against 93,890 dozen pairs for 1910, and their values were \$385,704 and \$315,740, respectively. Statistics showing the country of origin of the footwear imported are not yet available.

The total exports during 1911 of boots and shoes manufactured in the United Kingdom and made principally of leather were 1,152,244 dozen pairs, made of rubber 153,508 dozen pairs, and made of other materials 120,663 dozen pairs, and their values were \$16,327,681,

\$772,503, and \$415,351, respectively. The following table shows the quantity and the values of boots and shoes made principally of leather exported from the United Kingdom during 1910 and 1911 and the principal country of destination:

Destination.	1910		1911	
	Quantity.	Value.	Quantity.	Value.
	<i>Doz. prs.</i>		<i>Doz. prs.</i>	
France.....	51,297	\$1,528,675	48,000	\$1,496,745
British South Africa.....	384,909	5,261,802	373,280	5,127,292
British East Indies.....	101,000	1,453,550	125,591	1,773,236
Australia.....	122,167	798,588	126,082	969,290
New Zealand.....	74,804	942,694	81,834	1,104,423
British West India Islands (including Bahamas) and British Guiana.....	45,458	401,345	43,605	399,495
Other countries.....	307,003	4,358,315	253,852	5,455,200
Total.....	1,066,638	14,744,969	1,152,244	16,327,681

Since 1904, with the exception of the poor trade year of 1908, there has been a decided advance in the export of boots and shoes manufactured in the United Kingdom. The excess of exports over imports in 1904 was slightly under 6,000,000 pairs, while in 1911 there was an excess of nearly 11,000,000 pairs.

The exports of boots and shoes of foreign and colonial manufacture in 1911 aggregated 461,328 pairs valued at \$381,227, compared with 407,484 pairs valued at \$306,200 the previous year.

The Leather and Hide Trade.

There was an improvement in the leather industry of the United Kingdom in 1911, but it was confined largely to the boot and shoe branch of the trade. The recovery was more marked in the latter part of the year than in the earlier months. With low stocks at the close of the year and increasing consumption, prospects for 1912 are regarded as excellent. The imports of undressed leather into the United Kingdom in 1911 aggregated in value \$26,475,434, against \$24,584,716 in 1910, while the reexports increased in value from \$6,156,069 to \$6,852,353, leaving a balance for home consumption in 1910 of the value of \$18,428,647, and in 1911 of the value of \$19,623,081. The largest imports each year were from British India and the United States, although the receipts from the United States fell off in value from \$7,968,188 in 1910 to \$7,865,402 last year.

The imports of dressed leather into the United Kingdom in 1910 were valued at \$22,278,077, and in 1911 at \$21,724,435. The reexports in 1910 amounted to \$2,900,940 and in 1911 to \$2,516,097, leaving a balance for home consumption in 1911 valued at \$19,208,337. The principal countries from which the imports came were Germany and the United States, but, as in the case of undressed leather, there was a decline in the receipts from the United States, the total for the two years being of the value of \$11,776,574 in 1910 and \$10,768,420 in 1911. The exports of British tanned, tawed, or dressed leather in 1911 amounted to \$14,051,385 in value.

Dry hides were imported into the United Kingdom in 1910 amounting to \$9,031,790 worth against \$8,051,896 in 1911, while the imports of wet hides in 1910 aggregated in value \$11,762,466 and in 1911 \$10,180,323. The exports of British raw hides and undressed skins

in 1911 were valued at \$2,894,803, of which \$648,777 were from imported cattle slaughtered in the United Kingdom, compared with \$2,686,410 in the previous year.

The Rubber Market.

The fluctuations in the price of rubber, although not as pronounced in 1911 as in the preceding year, were sufficient to give an erratic tone to the market. The highest price for plantation rubber reached in 1911 was \$1.95 per pound and the lowest \$1.09 per pound as against \$3.12 and \$1.25, respectively, in 1910. The variations in the price of hard Para rubber in 1911 were \$1.75 and 94 cents per pound, while in 1910 they were \$3.04 and \$1.33 per pound. The world's production of rubber in 1911 is estimated at 85,000 tons, or 5,000 tons in excess of 1910. The increase was wholly in plantation rubber, as there was a small decline in the output of hard Para.

The imports of rubber into Great Britain in 1911 amounted to 45,300 tons, against 43,850 tons in 1910 and 35,000 tons in 1909. There were 28,480 tons reported in 1911, compared with 23,390 tons in 1910 and 19,890 tons in 1909. The stocks of rubber in the United Kingdom at the end of 1910 were placed at 5,200 tons, while at the close of 1911 they were estimated at only 4,300 tons.

There was a large increase in the amount of rubber offered for sale at the auctions in London last year compared with previous years. The London Times remarked that "this increase in auction business is gratifying, as it helps to eliminate much of the speculative element and to give more stability within reasonable limits to price."

As increasing production is being accompanied by a growing demand since new uses are being constantly found for rubber and with the disappearance of the speculative influences which were so pronounced in 1910, it is thought that fairly steady prices will be maintained for some time to come and that there is little danger of an excessive supply.

Demand for Clothing and Hats.

There was no special feature in the clothing trade in 1911 except that the extreme heat throughout the summer curtailed the sale of ordinary woolen goods, while it created an extraordinary demand for cotton suits for children and flannel suits for youths and men. Although the price of raw cotton in the latter part of the year was low as compared with 1910, there was only a small decline in the price of cotton cloth. The oversea trade was good.

The same conditions which changed the character of the demand for clothing in the summer months of last year affected the hat trade. The warm summer, together with large hats worn by women, made an unusually long and profitable season. The supply at times was inadequate to the demand. It is stated that wholesale dealers, in view of the enormous disappointments experienced in deliveries in 1911, gave exceptionally large advance orders for the current year.

Popularity of the American Motor Cars.

The great expansion in the motor-car trade continued in the United Kingdom during last year and was especially noticeable in the increased demand for commercial motors and in the rapid displacement of horse-drawn by motor omnibuses. Notwithstanding the satisfactory results attained in 1911, it is estimated that in 1912 at least

25,000 additional motor cars will be registered in the Kingdom. From the American standpoint the great achievement in 1911 was the triumph abroad—a decided triumph indeed in the United Kingdom—of the low-priced car. At the exhibition held at Olympia last November it was this type of car which attracted the most attention. It is recognized that the touring car is not adapted to the everyday uses of the business man. The annual license fee in the United Kingdom, which increases appreciably with the increase in horsepower, the saving in operating expenses, and facile manipulation are the principal causes of the popularity of the low-priced car.

Special attention should be paid in the United States to the construction of an attractive and artistic body for the cheaper grade of cars, because when other things are equal the style of the car will be the determining factor with the purchaser.

There were 6,778 complete motor cars in 1911 against 4,516 in 1910, valued at \$8,360,564 and \$7,007,575, respectively, imported into the United Kingdom; also 6,672 chassis imported, valued at \$8,389,306 against 6,553 chassis at a value of \$8,134,807 for 1910. The shipments of those built complete in the United Kingdom numbered 4,539 against 3,555 for 1910, and valued at \$8,784,154 and \$6,700,615 for the two years, respectively. The number of chassis exported which were built in the country was 733, valued at \$1,457,023, against 564 chassis valued at \$1,039,172 for 1910. The exports of complete motor cars from the United Kingdom last year of those of foreign or colonial origin numbered 1,047, valued at \$1,501,651, and of chassis 494 at a value of \$743,285.

Motor Trucks and Omnibuses.

Nothing was more significant in 1911 than the increased use of motor industrial vehicles. It was estimated at the close of the year that about 14 per cent of the business traffic on the streets of London was transported in motor vehicles. All the leading manufacturers have large orders for industrial or commercial motors. The demands are in excess of the supply, as the utility of such vehicles has now been thoroughly demonstrated and they are regarded as not only desirable but as indispensable in all branches of trade.

So successful has the motor omnibus been in London that in seven years about 5,000 horse-driven omnibuses and 18,000 horses have been retired through the introduction of 2,500 motor omnibuses by the various companies. It is estimated that double the number of omnibuses now in service could be profitably used over the existing routes in London and suburbs. It is stated that "one of the most remarkable innovations in motor omnibus within the past two years is the reduced cost of operation."

One of the great developments of the motor omnibus service, it is thought, will be in the direction of affording an opportunity to working men and women of going a considerable distance in the country on Sunday for a comparatively small expense. Very few railway trains are run in the United Kingdom on Sundays and this offers an additional inducement for the extension of the motor omnibus service.

A further, or at least a new, step in the development of the motor omnibus is the petrol-electric car which is being introduced in London. The advantages claimed for it are, "smoothness and silence of running,

increased power of acceleration, decreased cost of running, maintenance, and lubricants, and the durability of its system of transmitting the power from the petrol engine to the driving wheels." The Great Western Railway Co. is now making experiments with a petrol-electric coach which is an evidence of the competition that is now in progress between different power-producing systems for both rail and road traction.

According to the report of the Commissioners of Customs and Excise, there were 75,617 motor cars in the United Kingdom for the year ended March 31, 1911, on which license duties were collected.

Increased Trade in Motor Cycles and Bicycles.

Many of the British makers of motor cycles had difficulty in filling their orders last year. There was also a larger demand for high-grade bicycles. The system of selling bicycles on the installment-payment plan is being generally abandoned, and this has contributed to the sale of the high-priced machines. The increased production of bicycles in England, and to some extent in Scotland, last year was due to the increase in the export trade. More than one-third of the bicycles built in the United Kingdom are shipped abroad. The average declared value of the cycles shipped in 1911 was \$19.95, as compared with \$20.44 in 1910 and \$21.41 in 1909.

In 1911, 7,357 motor cycles (the product and manufacture of the United Kingdom), valued at \$1,357,413, were exported as compared with 3,341, valued at \$596,545 in 1910. Only 1,351 motor cycles were imported into the United Kingdom in 1911, valued at \$204,714 compared with 1,387 in 1910, of the value of \$215,571.

There were only 351 bicycles, valued at \$12,492, imported into the United Kingdom last year, against 433 in 1910 at a value of \$14,818, while the number exported last year was 146,718, valued at \$2,926,314, compared with 129,106 in 1910 of the value of \$2,640,130.

Promoting Trade in British Silk Goods—Artificial Silk.

An earnest effort is being made on behalf of the British silk industry and in 1911 conditions were better than for the previous year. In 1851 there were 130,723 silk workers in the United Kingdom, but in 1901 the number had fallen to 39,035. In the same period the silk workers in the United States had increased from 1,723 to 65,416. Since 1901 the situation has improved and many more people are engaged in the manufacture of silk in the United Kingdom than 10 years ago. During the "All-British shopping week" an attempt was made, through the displays of silks of British manufacture, to increase the demand for home production. The higher class of silk dress materials sold in the United Kingdom come almost entirely from abroad, while silk crape, men's ties and mufflers, silk plushes, and mixtures of silk and wool, all of English manufacture, are extensively sold. The Silk Association of Great Britain and Ireland is to give an exhibition of British-made silks in London in June of this year. The purpose of the exhibition, it is stated, is to demonstrate the advance which has been made in recent years in the variety of makes of English silk as well as in beauty of design and color.

The president of the Silk Association in an address stated "that \$98,043,224 worth less manufactured silk goods had been imported into the United Kingdom since 1903 than in the eight previous years, while the exports of manufactured goods had increased in value by

\$13,456,661." This condition could only be accounted for either by a great decrease in the home consumption of silk goods or a remarkable increase in the home productions. The latter could hardly be possible, since the imports of raw materials had not increased in value.

The most striking feature in the manufacture of artificial silk during 1911 was the progress made by the "viscose" method. The principal market for artificial silk is still provided, it is stated, by producers of embroidery and trimmings. One of the English newspapers, commenting on the artificial-silk trade, stated:

It is finding its way steadily into the piece-goods trade, and it is here that makers of artificial silk are chiefly looking for future developments. It is also being quite extensively employed in the manufacture of incandescent mantles. The state of the artificial silk trade was not satisfactory in 1911, on account of low prices. The world's production of artificial silk for the present year is estimated at 13,227,600 pounds, of which 5,511,500 pounds, it is thought, will be manufactured by the cupro-ammonium process, 4,409,200 pounds by the viscose method, and 3,306,900 pounds by the gun-cotton system.

Trade in Chemicals, etc.

The value of chemicals, drugs, dyes, and colors exported in 1911 aggregated \$97,783,237, as compared with \$90,361,834 in 1910. There was a falling off in the exports of bleaching powder to the United States in 1911 of 89,039 hundredweight, the total being 536,635 hundredweight, as against 625,674 hundredweight in 1910. There was a marked increase in the exports of sulphate of copper, 79,831 tons, valued at \$7,343,500, being exported last year against 42,706 tons, valued at \$3,812,538 in 1910. The exports of sulphate of ammonia aggregated 291,883 tons in 1911 of the value of \$18,639,162 against 283,610 tons in 1910 valued at \$16,432,749. The exports of soda compounds amounted to 6,618,880 hundredweight in 1911, against 6,286,747 hundredweight in 1910, but their value fell off in 1911 to \$9,072,820, as compared with \$9,123,481 in 1910. As a rule the prices of chemicals, drugs, dyes, and colors were well sustained during the year, and in fact in some instances prices were so far above the average that the hope has been expressed by the trade that in 1912 a more normal level may be reached.

Unsatisfactory Condition of the Tobacco Trade.

Again in 1911, as in 1910, the position of the tobacco trade in the United Kingdom was exceedingly unsatisfactory. In 1910 the number of manufacturers' licenses issued was 383, as compared with 407 the previous year. In 1911 there was a further falling off of 19, making a total number of licenses issued of 364, so that within the last two years 43 tobacco factories have been closed in the United Kingdom. The tobacco trade section of the London Chamber of Commerce presented a memorial, which bore the signatures of many thousands of licensed members of the trade, to the Government, petitioning for a modification of the duties on tobacco. The high cost of all descriptions of leaf tobacco in 1911 was also an adverse influence in the trade. Prices have been steadily advancing for some time past in consequence of an increased consumption that has not been fully met by an increased production.

In a review of the tobacco trade in 1911 the chairman of the tobacco trade section of the London Chamber of Commerce stated in part:

The position was considerably aggravated last year, owing to the disastrous results of the severe drought, which seems to have been prevalent not only in the United States but in every tobacco-growing country of the world, the effect of which not only cur-

tailed the quantity produced, but in many instances affected the quality as well. Nyasaland tobacco is steadily growing in favor with British manufacturers. Last season's import showed considerable improvement both in quality and in the important matter of packing and handling. The tobacco produced in this part of the world has great merits and competes more favorably with the best growths of Virginia and Kentucky than any leaf hitherto imported from British possessions or elsewhere.

British Colonial Tobacco Supplies—Imports and Exports.

According to the Colonial Office returns, Canada produces annually about 10,000,000 pounds of tobacco, while in 1910 5,500,000 pounds were produced in the Transvaal. The Cape Province is estimated to produce, in addition to small crops of Virginian and Turkish tobacco, about 1,000,000 pounds of "Boer tobacco," while Southern Rhodesia in the present year is expected to produce about 500,000 pounds. In 1910 Nyasaland exported about 1,700,000 pounds, and in 1909 the quantity for Australia is given as 1,400,000 pounds.

The total quantity of unmanufactured tobacco imported into the United Kingdom last year was 118,870,960 pounds, valued at \$19,565,427, compared with 111,257,544 pounds, valued at \$16,719,311 for 1910. The entries for home consumption were 33,409,545 pounds against 40,333,739 for 1910. The total imports from the United States were: Stemmed, 33,546,812 pounds, value \$6,227,490, compared with 27,475,502 pounds, value \$4,578,972 in 1910; unstemmed, 70,782,570 pounds, value \$9,486,511, against 71,475,847 pounds, value \$8,817,645, in 1910. The total quantity of tobacco exported from the United Kingdom last year was 15,532,678 pounds, valued at \$10,473,263, and snuff offals 8,985,995 pounds, valued at \$95,047.

Sources of Chilled and Frozen Beef and Mutton.

The decrease in the receipts of chilled beef from the United States continued during last year, and during November and December the imports almost stopped. In 1905 the imports of chilled beef from the United States aggregated 2,232,200 hundredweight, while last year the receipts were only 169,444 hundredweight. During the same period the imports from the River Plate increased from 653,560 hundredweight to 3,753,140 hundredweight. The arrivals from Canada in 1911 were only 2,520 hundredweight, against 8,680 hundredweight in 1910 and 13,580 hundredweight in 1909. There was a trial shipment received from New Zealand last year, and the meat arrived in fairly good condition. Four shipments were received from Venezuela totaling 858 quarters against 200 quarters for the preceding year. Of the total imports of frozen beef, amounting to 3,420,071 hundredweight, against 3,766,799 hundredweight in 1910, Argentina furnished 2,357,878 hundredweight, Australia 708,388 hundredweight, New Zealand 257,806 hundredweight, and Uruguay 65,486 hundredweight. Frozen beef from the United States amounted to but 4,906 hundredweight against 7,703 hundredweight for 1910.

The imports of fresh mutton amounted to 117,175 hundredweight, of which the Netherlands furnished 113,386 hundredweight. The total receipts of frozen mutton amounted to 5,220,276 against 5,261,623 hundredweight, of which 1,981,467 hundredweight came from New Zealand, 1,782,066 hundredweight from Argentina, and 1,291,696 from Australia.

British Meat Supplies—Receipts of Pork and Bacon.

The total supply of beef available from all sources for consumption in the United Kingdom during 1911 was placed at approximately 1,227,134 tons, and of mutton and lamb at 594,719 tons, or a little over 60 pounds of beef and 29 pounds of mutton and lamb per head of the population. These totals were made up of home-grown meat to the extent of 61.6 per cent, frozen meats 23.7 per cent, chilled beef 10.8 per cent, and 3.9 per cent of foreign live cattle and sheep and fresh-killed mutton.

The receipts of fresh pork last year amounted to 401,107 hundredweight, compared with 429,252 hundredweight for 1910. Of the total last year the Netherlands shipped 370,345 hundredweight and Belgium 14,537 hundredweight. Frozen pork imported amounted to 51,825 hundredweight, of which the United States furnished 4,099 hundredweight, compared with 1,044 hundredweight for 1910. Australia and New Zealand increased their shipments of pork in 1911 over the previous year.

Of the total imports of bacon amounting to 4,868,738 hundredweight last year against 3,863,389 hundredweight for 1910, Denmark furnished the greatest amount, being 2,122,087 hundredweight, followed by the United States with 1,817,835 (an increase of 510,914 hundredweight over 1910), and Canada 615,807 hundredweight. The imports of hams totaled 954,811 hundredweight against 719,126 hundredweight in 1910, of which the United States furnished 887,303 and 665,775 hundredweight, and Canada 62,295 and 37,621 hundredweight for the two years, respectively.

The imports of frozen rabbits in 1911 aggregated 23,393 tons, or 6,795 tons less than in 1910.

Storage of Meat—Live Stock.

The Port of London Authority is building a storehouse to hold 84,000 carcasses alongside its premises at Smithfield and is preparing to enlarge its storage supplies at the docks to meet the annual increase of the frozen-meat trade.

There were 200,397 head of live cattle against 219,561 head in 1910 imported into the United Kingdom last year, of which 155,816 head came from the United States, 42,239 head from Canada, and 2,342 head from Channel Islands. The number of sheep and lambs imported was 47,673, of which 42,805 came from the United States and 4,868 from Canada.

There was an increase in 1911 of 100,658 cattle in the United Kingdom, the total being 11,866,111, against 11,765,453 in 1910, but a decrease of 684,780 in the number of sheep, bringing the aggregate down to 30,479,807, against 31,164,587 at the close of 1910. With the reduction in the number of sheep and with an increasing number of cattle being utilized for dairying purposes it is manifest that in 1912 even to a greater extent than last year the supplies of meat for the United Kingdom must come from abroad. The drought of last summer caused the slaughter of a large number of animals to save the abnormal expense of feeding them.

The number of horses on the farms of the United Kingdom was less by 64,000 last year than for 1910, but there was an increase of 472,000, or 20 per cent, in the number of pigs.

Effect of Drought on Crops.

The dominant feature of British agriculture in 1911 was the drought which occasioned, it is estimated, a loss of \$97,330,000 on crops and stock. The greatest loss was in the meadow hay crop, which showed a deficiency, as compared with 1910, of 27,500,000 hundredweight. The oat crop decreased 6,000,000 bushels, barley 2,400,000 bushels, clover hay 500,000 tons, turnips 6,250,000 tons, mangels 1,582,000 tons, beans 1,500,000 bushels, and peas 140,000 bushels.

Wheat gave the largest yield of any of the cereals, about 4 per cent above the average, while barley and oats were 5 per cent below normal, beans 17 per cent, and peas about 3 per cent. The potato crop was exceptionally good, being about 10 per cent above the average. The yield of wheat per acre was 32.87 bushels, compared with 30.33 bushels in 1910 and a decennial average of 31.75 bushels. There was a gain in the wheat area in 1911 of 100,000 acres compared with 1910, bringing the total up to 1,900,000 acres. Barley was cultivated on 1,600,000 acres, a decline of 7.6 per cent in the acreage compared with 1910. To the raising of oats 3,000,000 acres were devoted, while 572,000 acres, or 32,000 acres more than in 1910, were planted in potatoes.

Hop Industry—Farm Holdings—Infectious Diseases.

There was a slight revival in the hop industry and about 200 acres more were under cultivation than for the previous year, the total area being 33,000 acres.

At the close of last year there were 292,500 farms of 1 to 50 acres in England and Wales. Holdings of 1 to 5 acres increased by 2,085 and those of 5 to 20 acres by 1,601 compared with the previous year.

There were a number of outbreaks last year of infectious diseases among the live stock. A commission has been appointed to inquire into the causes of the foot-and-mouth disease, which proved so disastrous to the farmers last year. Although the State paid \$58,398, the sum was trifling compared with the loss sustained by the stock-breeding industry. Other outbreaks were swine fever, anthrax, glanders, and sheep scab.

Grants for Agricultural Research—Agricultural Credit Society.

There was appropriated last year \$91,684, against \$59,858 for 1910, to cover grants for agricultural research in the colleges and universities of the country. Almost all the students in the past who have received a special agricultural education in England and Wales have identified themselves in some way with the land. It is thought by the Board of Agriculture that not less than 10,000 persons in England and Wales should receive special agricultural instruction, although at present provision is made for only a little more than 5 per cent of that number.

A small but promising agricultural credit society was organized last year, which is really the pioneer British agricultural bank. If it proves a success it will doubtless lead to large and important developments, as the experiment is being watched with keen interest by those, and their number is large, who feel that some special facilities should be provided enabling farmers to borrow under proper restrictions on their peculiar assets.

Promoting the Poultry Industry.

In 1911, even more than in the preceding year, an effort was made to stimulate the poultry industry throughout the United Kingdom. Demonstration trains were run to show the farmers the best methods of raising poultry and to impress upon them the benefits accrued by devoting more attention to this important department of farming. An appropriation was made out of the development fund for the establishment of a national poultry institute. A capital sum of \$41,365 was set apart for this object, together with a yearly grant of \$9,733, on condition that a like sum be obtained through private donations. It is stipulated in the grant that the institute shall teach poultry keeping, train expert instructors, and conduct research work.

The imports of eggs into the United Kingdom in 1911 aggregated 19,057,895 great hundreds (great hundred=120), compared with 18,344,137 great hundreds in 1910. Russia furnished 10,041,888 great hundreds, valued at \$18,465,487, and Denmark 3,992,986 great hundreds, valued at \$9,881,949. It is apparent that the eggs from Denmark commanded a much higher price on the English market than those received from Russia. The imports from the United States were small. Last year small eggs were sold at \$2.40 to \$4.25 and large eggs at \$2.80 to \$5.30 per great hundred. The higher prices prevailed at the close of the year.

Imports of Cheese and Butter.

The total quantity of cheese imported into the United Kingdom in 1911 was 2,348,322 hundredweight valued at \$34,746,528, against 2,456,340 hundredweight in 1910 valued at \$33,140,262. While there was a small falling off in the imports from Canada more than half the quantity came from that country. The imports from the United States rose from 38,247 hundredweight in 1910 to 150,321 hundredweight last year of the value of \$2,102,420. The prices of cheese in 1911 were \$14.60 to \$21.40 per hundredweight, against \$12.65 to \$15.60 for the previous year.

The imports of butter in 1911 into the United Kingdom reached a total of 4,302,956 hundredweight valued at \$119,726,173, against 4,325,539 hundredweight valued at \$119,197,374 in 1910. The increase in value in 1911, notwithstanding the falling off in quantity, was due to the prolonged drought in Great Britain and in various parts of the Continent and to the general advance in the prices of almost all commodities in all parts of the world. Denmark was the chief source of supply of butter to the United Kingdom in 1911, the imports from that country being 1,707,178 hundredweight. The receipts of butter from the United States amounted to 23,316 hundredweight valued at \$587,311, compared with 756 hundredweight of a value of \$19,831 in 1910. The amounts of butter supplied the British market by some of the other countries during 1911 were as follows in hundredweight of 112 pounds each: Australia, 874,399; Russia, 638,284; Sweden, 360,357; New Zealand, 276,446; France, 171,080; Netherlands, 104,655; and Canada, 61,936. The average wholesale prices for butter in 1911 were \$26.75 to \$33.58 per hundredweight, against \$21.90 to \$28.70 for 1910.

Imports of Wheat and Flour.

The imports of wheat from the United States last year increased nearly 2,000,000 hundredweight compared with 1910, while wheat meal and flour show a slight decrease. The following table shows the amounts of wheat and wheat meal imported from the principal countries during 1910 and 1911:

Countries.	1910	1911	Countries.	1910	1911
WHEAT.			WHEAT MEAL AND FLOUR.		
	<i>Cwt.</i>	<i>Cwt.</i>		<i>Cwt.</i>	<i>Cwt.</i>
United States.....	10,948,900	12,939,229	United States.....	5,123,780	5,116,411
Russia.....	28,941,600	18,106,100	Germany.....	587,900	282,025
Germany.....	98,100	51,300	Belgium.....	65,250	35,300
Roumania.....	939,200	1,952,300	France.....	438,900	399,700
Turkey.....	134,300	413,800	Austria-Hungary.....	124,207	106,050
Chile.....	633,300	112,700	Argentina.....	101,400	88,000
Argentina.....	15,131,800	14,748,600	Australia.....	407,800	445,400
British East Indies.....	17,916,738	20,161,518	Canada.....	2,783,701	3,268,768
Australia.....	13,117,500	13,910,720	Other countries.....	327,553	323,478
New Zealand.....	630,000	730,500			
Canada.....	16,449,200	14,373,700			
Other countries.....	281,200	608,620			
Total.....	105,222,638	98,109,067	Total.....	9,960,491	10,066,132

The Fruit Market.

The imports of raw fruit (excepting bananas) into the United Kingdom in 1911 aggregated 12,921,066 hundredweight, valued at \$45,719,239, against 12,761,838 hundredweight of the value of \$42,261,090 in 1910. Last year 6,714,479 bunches of bananas, valued at \$8,943,099, were imported, against 6,094,579 bunches in 1910, valued at \$8,266,022. There was a slight increase in the quantity of apples imported and a falling off of nearly 200,000 hundredweight in the imports of oranges. With the exception of apricots, peaches, lemons, and plums, there were slight increases in the imports of all other raw fruits.

The great bulk of the imports of American fruit into the United Kingdom consists of apples, the receipts of which amounted to about 1,250,000 barrels (three boxes of California or Oregon apples being regarded as equivalent to a barrel) last year. The fruit in some instances did not come up to the usual standard, which was due, it is said, to the hot weather of the summer and early autumn ripening the fruit a month or six weeks earlier than usual. Prices of all varieties, with the exception of Newtown pippins, varied during the year from \$3.40 to \$4.86 per barrel. The Newtown pippins from Virginia, which were exceptionally fine, realized \$4.86 to \$8.75 per barrel. The California Newtowns commanded \$1.70 to \$2.55 per box, while the apples from Oregon, of which the supply was not great, varied in price from \$3.40 to \$4.13 per box. American apples are popular in the United Kingdom, although they have formidable rivals in the Canadian and Tasmanian products.

There was a shipment of peaches from the State of Washington which caused considerable interest because of the fine condition in which the fruit was received. There were one or two consignments of peaches from Canada, and it is stated that imports from that source will probably increase. Spanish oranges were so plentiful last year and sold at such a low figure that there was only a limited demand for California and Florida oranges.

While improved methods of packing have been noticeable in the fruit arriving from the United States in recent years, there is an occasional complaint, and a comparison instituted between American and Canadian shipments results greatly to the advantage of Canada.

Receipts of Tea and Coffee.

The year 1911 was one of great prosperity for tea producers, as the increase in values which was characteristic of the latter half of 1910 continued throughout 1911. The prices for Indian and Ceylon tea were higher than at any time since 1897. Duty payments were made on 293,344,000 pounds in 1911, against 287,079,000 pounds in 1910 and 283,551,000 pounds in 1909. The per capita consumption in the United Kingdom in 1911 was placed at 6.53 pounds. The total imports in 1911 aggregated 348,069,492 pounds, valued at \$63,567,882, as compared with 331,847,090 pounds, valued at \$55,385,909 in 1910. The most noticeable increase was in the imports from China, which amounted to 24,817,268 pounds in 1911, against 18,914,720 pounds in 1910.

There was a large decrease in the imports of coffee, as only 785,476 hundredweight were received in the United Kingdom in 1911, against 937,330 hundredweight in 1910, the amount entered for home consumption being 259,849 hundredweight for the former and 266,983 hundredweight for the latter year.

Fluctuations in Prices of Sugar, and Cultivation of Sugar Beets.

As in other countries, the United Kingdom experienced fluctuations in the prices of sugar owing to the drought which so seriously affected the beet-sugar crop. The cost to the United Kingdom by reason of the increased prices of sugar was estimated at \$82,730,000 to \$97,330,000. Persistent efforts were made in various parts of the country to demonstrate that the sugar beet could be successfully cultivated. Excellent results were secured in Norfolk, where about 250 acres were planted in sugar beets. Experiments which were conducted on the college farm at Wye were regarded with unusual interest, as they were carried out in conjunction with the Board of Agriculture. The gross yield from the 8 different varieties which were planted ranged from 20 tons to 28 tons 16 hundredweight per acre, and the net weight of washed roots was 15 tons 10 hundredweight to 21 tons 12 hundredweight. The sugar in the roots varied from 12.93 to 19.24 per cent. The cost of the crop was \$70.56 per acre. An attempt is being made by a combination of British and Dutch interests to secure the building of one or more sugar factories in England in order to develop sugar-beet culture in the United Kingdom.

The Lumber Market.

The encouraging features of the timber trade in 1911 were the activity in shipbuilding, box making, and in the manufacture of furniture. Of the total imports of lumber into the United Kingdom last year, Russia supplied 47 per cent, Scandinavia 25 per cent, and the United States and Canada 26 per cent.

The imports of sawn and planed woods in 1911 aggregated 5,572,260 loads (load=50 cubic feet), valued at \$77,688,694, as compared with 5,993,629 loads of the value of \$82,775,218 in 1910. The receipts were the smallest, with the exception of 1908, for the past 15 years.

One of the principal importers in London, commenting on the lumber trade, stated "that the trade had to confront special and unforeseen difficulties, such as the dislocation of trade through the protracted series of labor troubles and the great increase in freights leading directly to an increase in the cost and eventually curtailing the volume of supplies."

The imports of mahogany in 1911 aggregated 104,712 tons, valued at \$4,307,402, against 95,776 tons, valued at \$3,825,030 in 1910. Among American hardwoods black-walnut logs of large size and prime quality were salable at good prices. There was a demand for large, round oak logs; quartered-oak lumber was in fair demand with little fluctuation in prices. The total imports of teak in 1911 exceeded those of 1910 by about 40 per cent and the increased quantity consisted largely of logs. Sawn or split, planed or dressed lumber imported from the United States in 1911 amounted to 412,404 loads, against 412,814 loads in 1910. The imports of hewn wood from the United States increased from 164,709 loads in 1910 to 190,931 loads in 1911.

[An industrial review of the United Kingdom for 1911 will appear in the next issue of Daily Consular and Trade Reports.]

MEXICAN NOTES.

[From message of President Madero to the Mexican Congress.]

New Lighthouses on the Coast.

A plan for reorganizing the lighthouse service was prepared by a special commission, and the immediate result of its reduction to practice was a saving of \$300,000 in the current fiscal year without detriment to the efficiency of the service. The General Lighthouse Bureau, formerly established at Veracruz, is being transferred to this capital. New lights have been established on the gulf littoral, and it is intended to establish still others. The Pacific littoral has been surveyed with a view to increasing its insufficient illumination and some provisional lights have already been established.

[From the Mexican Herald.]

Railway Construction.

Work has commenced on the extension to Queretaro of the Acambaro to Jerecuaro railway.

The governor of the State of Puebla has granted a period of two months for the company holding the concession to construct an electric line between Puebla and Atlixco to present modified plans for the line. Once these plans are accepted, the State government will fix the period of time in which the construction must be completed.

Chemical Laboratory—Ocean Mails.

The Department of Hacienda has been asked to approve the plans for the construction of a chemical laboratory in the National Geological Institute.

A new mail contract has been made with the French trans-Atlantic company for the transport of mails between Mexico and France. The contract price per sack of mail has been reduced 50 centimes (10 cents).

Motor Busses in Canada.

Consul Felix S. S. Johnson, of Kingston, writes that three double-deck motor busses, to cost \$10,000 each, will be started in North Rosedale, a suburb of Toronto, if the city council passes the recommendation made by the board of control, two of them for a 20-minute service, and the third for emergencies and rush hours. An English company talks of establishing a motor-bus service in Toronto this summer, beginning with about 50 busses, with ultimately about 300 in commission.

CANADIAN NOTES.

[From Consul Theodosius Botkin, Campbellton New Brunswick.]

The log cut of 1911-12 is larger than usual. The exact figures have not been ascertained but the approximate result is 125,000,000 feet; and upon this estimate, for the lumber plants within its jurisdiction, the Restigouche Boom Co. has let the steam-driving contract for this season. The estimate last year was 110,000,000 feet. There is abundance of snow in the forest and the melting is gradual, giving promise of a successful driving season.

Opening of navigation.—The 3-foot ice which for five months had safely bridged the Restigouche from tide head to the Dalhousie bar began breaking up May 2. The severity of the last winter may be judged from the fact that substantial ice closed Chaleur Bay as far eastward as a line crossing from Paspebiac on the Gaspé coast to Grande Anse on the Caraquet shore—a condition that had not occurred, I am told, during the preceding 24 winters.

Grindstone quarries at Stone Haven.—The treasurer of the Read Stone Co. has furnished the following data pertaining to that company's quarries:

Our quarry area consists of at least 30 acres, of an average thickness of about 20 feet of merchantable stone. A considerable portion of this stone is below tide level and is reclaimed by building large dams; the one under construction at present is 1,400 feet long. The stone is a blue sandstone lying in a strata 12 to 48 inches thick. This quarry area has been under its present ownership for 50 years, but was worked for about 20 years before this.

The output of grindstones during 1909, 1910, and 1911 was 2,350 tons, 2,500 tons, and 2,522 tons, respectively. The shipments to the United States during these same years amounted to 1,850 tons, 1,968 tons, and 1,776 tons. The yearly production of cliff stone is approximately 20 tons, shipped to the United States; the value of the annual output of scythe stones, whetstones, etc., is about \$1,000, practically all sold to Canadian purchasers. The average number of laborers annually employed is about 100. The quarry season lasts from five to six months.

Development of Northern Ontario.

Tenders will shortly be invited at Toronto by the government of Ontario for the Abitibi pulp limit. This is the first step in the government's development policy for northern Ontario, for which \$5,000,000 was appropriated at the last session of the legislature. Incident to the lease of this limit will be the construction of works at Iroquois Falls, and in order to facilitate the development of the district, special conditions will be attached to the lease.

COOPERATIVE FARMING IN SCOTLAND.

[From Consul H. D. Van Sant, Dunfermline.]

The Dunfermline Cooperative Society's report for the two hundred and second quarter shows a successful year's farming. The association paid \$27,788 to farmers in the district for milk, and received \$57,370 from the milk and butter produced on its farms at Urquhart and Logie together with the sale of milk and butter from other farms not owned by the society. The net profit on farms and dairy combined was \$14,118; on the milk alone the profit was \$9,411.

During the 19 years the cooperative society has undertaken farming, this is the seventh in which a profit has been made on the farms as apart from the dairy. Last year there was a loss on the two of \$15,485.

WAGES AND FOOD PRICES IN URUGUAY.

[From Consul Frederic W. Goding, Montevideo.]

The food materials consumed in Montevideo (whose population, according to the census of 1908, numbered 291,465) during the months of January and February, 1912, are given, in part, in the following table:

Articles.	January.	February.	Articles.	January.	February.
Oxen.....number..	516	554	Vegetables.....kilos..	2,698,517	2,778,295
Yearlings.....do..	6,554	4,745	Fruits.....do..	516,158	348,650
Cows.....do..	8,476	7,349	Eggs.....dozen..	7,731	17,764
Calves.....do..	2,302	1,965	Fowls.....number..	5,926	6,534
Sheep.....do..	11,654	11,949	Chickens.....do..	6,926	7,660
Goats.....do..	5,213	3,795	Other birds.....do..	817	802
Hogs.....do..	635	718	Water.....liters ¹ .	466,033,000	451,320,000
Fish.....kilos ¹ ..	110,189	99,645			

¹ Kilo=2.2046 pounds.² Liter=0.26417 gallons.

During the same period the wages received by workers in the various occupations were (the Uruguayan peso being equal to \$1.034 United States gold): Per day—blacksmiths, 1 peso to 1.80 pesos; brick masons, 1.20 to 1.70 pesos; carpenters, 1.20 to 1.85 pesos; day laborers, 1.20 pesos; marble cutters, 1.20 to 1.50 pesos; painters, 1.15 to 2 pesos; pavement workers, 1.30 pesos; peons, 1.20 pesos. Per month—laborers, 13 pesos; male servants, 22.50 pesos; female servants, 14 pesos. Rents averaged, per month, 5 pesos (\$5.17) each person.

The prices for commodities in daily use were approximately as follows:

Articles.	Pesos.	Articles.	Pesos.
Beef:		Fuel:	
Cows.....kilo ¹ ..	0.12	Alcohol, denatured.....liter..	0.40
Oxen.....do..	.10	Coal.....hectoliter ² ..	1.00
Veal.....do..	.12	Kindling (stove length).....pieces..	16.00
Yearling beef.....do..	.11	Prepared vegetable substances:	
Mutton.....do..	.12	Bread.....	
Pork:		First quality.....kilo..	.07
Fresh.....do..	.30	Second quality.....do..	.05
Salt.....do..	.30	Flour.....	
Poultry:		Corn.....do..	.08
Chickens.....pair..	.70	Farina.....do..	.08
Eggs.....hundred..	3.50	Wheat, 1st quality.....do..	.06
Fowls.....pair..	1.00	Wheat, 2d quality.....do..	.05
Geese.....do..	.80	Macaroni.....do..	.12
Turkeys.....do..	3.50	Olive oil.....	
Fish.....kilo..	.07	First quality.....liter..	.48
Beverages:		Second quality.....do..	.36
Coffee.....		Rice.....	
First quality.....do..	.80	First quality.....kilo..	.16
Second quality.....do..	.60	Second quality.....do..	.13
Tea.....		Sugar.....	
First quality.....do..	2.40	First quality.....do..	.18
Second quality.....do..	1.60	Second quality.....do..	.14
Wine.....		Lights:	
First quality.....liter ³ ..	.16	Candles.....	
Second quality.....do..	.14	First quality.....each..	.04
Yerba mate.....kilo..	.30	Second quality.....do..	.025
Dairy products:		Kerosene.....liter..	.08
Butter.....do..	1.12	Matches.....	
Cheese.....do..	.40	First quality.....box..	.02
Milk.....liter..	.08	Second quality.....do..	.01
		Soap.....kilo..	.10

¹ Kilo=2.2046 pounds.² Liter=1.05668 quarts.³ Hectoliter=2.83774 bushels.

The prices given are those paid, in cash, by the wives of the laborers who visit the markets each morning to purchase their daily supplies.

It is difficult to ascertain average daily expenses, as the wants and desires of each family vary so greatly.

The prices given below, which are those of some of the garden vegetables sold in the local markets, will bear on the question of the cost of living in Montevideo:

Vegetables.	Price.	Vegetables.	Price.
Basil.....dozen bunches..	\$0.04-\$0.06	Peppers, chili.....dozen	\$0.04-\$0.40
Beans, string.....2.2 pounds..	.30- .40	Potatoes.....220.4 pounds..	3.50- 4.00
Cabbage.....dozen.....	.20- 1.00	Potatoes, sweet.....do.	5.00- 6.00
Carrots.....dozen bunches..	.20- .40	Pumpkins.....each.....	.10- .40
Chicory.....do.....	.12- .20	Radishes.....dozen bunches..	.08- .12
Corn.....dozen.....	.10- .20	Salsify.....do.....	.30- .80
Eggplant.....do.....	.12- .30	Spinach.....do.....	.30- .40
Endive.....dozen bunches..	.06- .20	Tomatoes.....dozen.....	.08- .30
Garlic.....bunch.....	.08- .12	Turnips.....dozen bunches..	.20- .30
Leeks.....dozen bunches..	.20- .30	Vetches.....2.2 pounds..	.30- .40
Lettuce.....dozen.....	.06- .20	Water cress.....dozen bunches..	.20- .35
Muskmelons.....each.....	.04- .20	Watermelons.....each.....	.10- .40
Onions.....2 dozen.....	.08- .12		

RAISING OSTRICHES IN MADAGASCAR.

[From Consul Louis Goldschmidt, Nantes, France.]

The following information relative to raising ostriches in Madagascar has just been published by a commercial journal of Nantes:

Ostriches were first imported into Madagascar in 1902; five pairs were offered to the Government and placed on a farm at Tulear. The beginning was hard, and a pair of birds died after a few months. The ostriches were then transferred to Beticky, where their raising became easier, owing to better climate and an abundant supply of grass. In 1904, the imported ostriches having reached their full growth, young ostriches were hatched, and in 1909 the Beticky farm had 228 birds. Trials with artificial incubation proved unsatisfactory; natural incubation, on the contrary, was successful. In the past few years, however, new incubators were used and the results have been promising.

The acclimating of the ostriches in the southwest of Madagascar has been entirely satisfactory, and the Government has just opened a new farm at Marovoay, near Majunga. The birds born at Beticky are stronger than those which were imported; the race is improving, and it is expected that before long Madagascar ostriches will successfully compete with those of the Cape Colony.

The production of feathers has given promising results, and the following figures show that the sales are increasing: 1907, \$213; 1908, \$751; 1909, \$1,061; 1911, \$2,550.

At Paris white feathers, slightly tinted, sell for \$164.05 per 2.2046 pounds; white feathers, first grade, \$92.65; "Bayoque" feathers, \$86.80; and gray feathers, \$12.15.

CEMENT FACTORY CONCESSION IN PERU.

With reference to the project for a Portland cement factory in Peru, referred to in foreign trade opportunity No. 8309, in Daily Consular and Trade Reports for March 9, 1912, Consul General Eduardo Higginson, of Peru, located at New York, writes to the Bureau of Manufactures that he has received the following cablegram from his Government:

Under date of April 26, 1912, the Government rejected the reconsideration solicited by Mr. Rospigliosi, leaving in full force the exclusive privilege granted to Mr. Garcia Lastres for 10 years, to manufacture Portland cement.

Consul General D. F. Wilber, of Vancouver, transmits press accounts of "Car shops for Port Mann, British Columbia," and "Plans for Great Northern Railway improvements in Vancouver," both of which will be loaned to firms applying to the Bureau of Manufactures.

FAR EASTERN TRADE NOTES.

[From Consul General George E. Anderson, Hongkong.]

Hongkong Wireless Station—Hosiery Trade.

It is announced that the naval authorities at Hongkong are to erect the wireless telegraph station they have long discussed, but that there will also be erected a commercial station of comparatively smaller power. While business circles in Hongkong are not satisfied with the proposed arrangement, it will be so much better than no wireless service at all that they are disposed to accept it without complaint.

An unusual stimulus to the trade in hosiery in this part of China has been given by the increased production of hosiery mills in Japan, particularly at Osaka. Imports of hosiery of the cheaper grades are growing rapidly in the open ports of China in spite of the immensely increased output of local hosiery makers. The Japanese makers are turning out cheap-grade goods especially manufactured for the Chinese market and are securing increasing business.

Silver Exchange—Indo-China Rice.

The uncertainty of silver exchange is having a marked effect upon all lines of business in China, and the power of China to absorb silver is one of the chief elements of uncertainty in the situation. As bearing upon this question it is pointed out in Eastern publications that in the past two years India has absorbed £42,400,000 (\$206,339,600) of gold and silver imports (net) as a partial offset of the balance of trade in its favor of £100,300,000 (\$488,109,950).

In consequence of the fact that the rice crop of Cambodia is reported as more or less of a failure the Government of Indo-China has prohibited the export of any grain of Cambodia production for the time being. Rice exports at Saigon up to the middle of March have been reported at 38,268 tons, as compared with 101,923 tons for the same period last season. The prices quoted the present season are on the basis of \$5.92 local currency per picul, or substantially 2 cents gold per pound, as compared with \$5.18 local currency or about 1.6 cents gold per pound at the exchange then obtaining at the same time last season.

New Chinese Coinage.

The provisional government at Canton is issuing the new 20-cent pieces for which provision was made some time ago. The coins are the first to be issued under the new government in China, and instead of the well-known dragon design the coin bears on one side Chinese characters for "Republic of China, First Year, Kwangtung Province." On the other side are the words "Kwangtung Province, Twenty Cents," in English.

The plans of the Government are to issue these coins to the face value of about \$8,000,000 local currency, the coins to contain silver to the actual value of about \$7,000,000 local currency. Notes will be issued against the coins probably to the value of about twice the face value of the coinage issue. While it is recognized that this issue will make the reform of China's currency more difficult to the amount it represents, the authorities consider that the force of present exigencies makes this action necessary. The coins are substantially the same in

value and nature as the vast issue of 20-cent pieces and other subsidiary coinage which has been made by various Provinces in China during the past seven or eight years.

[For other articles having a bearing on the monetary system of China see the following 1911 issues of Daily Consular and Trade Reports: Sept. 16, p. 1242; Oct. 28, p. 502; Oct. 30, p. 521; Dec. 16, p. 1369; Dec. 22, p. 1474; and also a previous report from Consul General Anderson that was published on Jan. 2, 1912.]

SOUTH AFRICAN COMMERCIAL NOTES.

[From the British and South African Export Gazette.]

Tins.—About 50,000 empty paraffin and petrol tins will be required by the Orange Free State Forestry Department, for which tenders are now being considered.

Motor club.—An indication of the growth of the motoring movement in Orange Free State Province and the demand for cars is the formation of the Orange Free State Automobile Club.

New rolling stock to the value of \$2,190,000 is being added to the equipment of the South African Government railways, a portion being under construction at the local railway workshops.

The cycle trade is evidently booming at Nairobi. No fewer than 1,050 machines were registered there in five recent weeks. The extent to which Rhodesia is also a market for bicycles and motor cars is indicated by the fact that nearly 3,000 of the former and 45 of the latter were licensed in Bulawayo alone last year.

Machinery orders.—Although the huge sum of \$68,165,000 was spent on mining machinery and stores in the Union of South Africa in 1911, it is not improbable that this will be exceeded this year, owing to new installations projected and the increasing tendency to adopt labor-saving appliances wherever possible.

Basket trade.—The Natal Wickerwork Co. (Ltd.), has about 2,000,000 osier cuttings growing near Edendale, at which place it has a basket-ware factory. There is a good market for this class of goods, especially for fruit baskets, which are largely used in the Cape Province, and poultry baskets for sending birds to market or to shows.

Traction plowing.—A writer in the Rhodesia Agricultural Journal speaks of the scope for steam-plowing tackle to do useful and profitable work in Rhodesia and makes enthusiastic reference to the performance of a large eight-furrow American plow drawn by one of the fine single cylinder 25-horsepower traction engines built by a firm in Gainsborough, England.

Credit restrictions.—Some South African merchants are again urging the abolition of the extended credit system, attention being drawn more particularly to the position of wholesale merchants, who get only 60 to 90 days' credit and then have to wait six months or more for payment of their own accounts. The trouble, of course, is deep-rooted in the customs of the market from the public upward, but storekeepers could do much by making their cash business more attractive.

Electrical plant.—One of the leading Johannesburg newspapers has installed a complete electrical plant for lighting, heating, and power purposes. Some 500 incandescent and 10 arc lamps are included in the lighting plant. The heating provides for 100-kilowatt and the power totals 120 horsepower, the principal motors being of 45 horsepower of the interpole direct-current type, 460-500 volts. It is not so long since contracts on this scale emanated only from Government departments, municipalities, and mining companies.

Railway shops.—The list of important British industrial concerns that have established works in South Africa, or contemplate doing so, is growing steadily. One of the latest additions is a railway car works of a Birmingham firm, which is considering establishing a branch which would not only serve the South African market, but the whole of the Southern Hemisphere. Bloemfontein may be the location of the projected enterprise, which is not surprising in view of its central position in regard to the railway system and also of the lead given by the Government in establishing its own works there. The importance and value of the business which will be contingent on the South African railway construction program for some years to come certainly justify the boldest enterprise designed to profit by it.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

No. 8849. Tenders for station and other buildings.—Sealed tenders addressed to the Commissioners of the Transcontinental Railway, Ottawa, Ontario, Canada, will be received by them until May 31, 1912, for the erection of station and other buildings required along the line of the Transcontinental Railway. Plans and specifications may be seen and full information obtained at the office of Mr. Gordon Grant, chief engineer, Ottawa, or at the various district offices.

No. 8850. Underwear, hosiery, and cotton goods.—One of the commercial agents of the Department of Commerce and Labor reports that a firm in the Levant desires to get in connection with American manufacturers of underwear and hosiery. There is a large demand for hosiery which can be retailed at 15 to 25 cents per pair, and this firm is prepared to do a large business in the lines mentioned. The same firm would also be pleased to hear from manufacturers of gray sheetings and drills of 36 inches width and 3 yards per pound and of gingham.

No. 8851. Soda ash and caustic soda.—An American consular officer in a European country reports that a business firm in his district is in the market for a combined order of soda ash (98/100 per cent) and caustic soda (75 per cent), amounting to about 3,000 tons. Correspondence should be addressed to this firm without delay.

No. 8852. "Tissue foil."—A business man in Canada recently requested correspondence with American manufacturers of window-sign letters, and he has informed an American consular officer that none of the replies were from firms manufacturing what he wishes. He is particularly interested in what is known as "tissue foil," which he states is of gold and tin and of silver and tin. American manufacturers of such articles should get in touch with this merchant as soon as possible.

No. 8853. Telephone equipment.—A European city is about to reorganize its telephone system and to establish 10 central stations instead of the present outgrown system of one central only. Only local firms will be allowed to compete for the orders to which this work will give rise, but such firms will be permitted to offer equipment materials from foreign countries. One local firm, which proposes to submit tenders, has informed an American consular officer that it desires to get in touch with firms in the United States wishing to offer equipment for centrals. Price lists with best terms should be sent immediately direct to this firm, as the tenders are to be made out during June. Correspondence on this subject addressed to the consular officer in question will also be delivered to other local firms of good standing.

No. 8854. Cars and light rails.—An American consul reports that several cacao planters in his district have requested to be furnished with catalogues and price lists of cars and light rails with the intention of installing same to carry their cacao from the fields where it is grown to the drying house. The type of car and rail wanted is of the cheapest kind, not only because most of the planters have but limited capital, but also they prefer to order goods when possible from their own country rather than from the United States. No railways have been installed yet on the plantations, but if the owners can get cars and rails at satisfactory prices from the United States they are ready to place orders.

No. 8855. Cotton goods and waste.—A report from a commercial agent of the Department of Commerce and Labor contains the information that a firm in Turkey would like to buy cotton waste, particularly motes, strippings, and flyings, and desires to communicate with American exporters of the same. Samples and prices c. i. f. Turkish port should be sent with first communications. The same firm also handles cotton goods and would like to hear from manufacturers of heavy sheetings, drills, and gingham.

No. 8856. Tramway materials.—The appropriations for the year 1912-13 for the Osaka, Japan, municipal electric tramways provide for the extension of the system by about 6 miles, and a large quantity of materials, to the extent of about \$1,985,532, will be ordered from foreign sources. The principal items will include rails, motors, brakes and other truck apparatus, and copper wire. Bridge material is also likely to be required.

- No. 8857. Iron fencing and tiling.**—An American consulate in the West Indies has been asked for catalogues of plain and ornamental iron fencing and of plain and ornamental tiling for outdoor and indoor use. Prices f. o. b. Mobile or New York should be quoted, as well as any discounts.
- No. 8858. Conveyor belt for ore handling.**—Tenders will be received for 1,200 linear feet articulated conveyor belt for ore handling. Particulars may be obtained upon application to Mr. Ivan C. Barling, Royal Exchange, Middlesborough, Yorkshire, England.
- No. 8859. Wireless-telegraph stations.**—The Post and Telegraph Department, St. Petersburg, Russia, will accept tenders for wireless-telegraph stations on the White and Kara Seas, at an estimated cost of \$51,000.
- No. 8860. Railway construction.**—The Russian Government is prepared to receive tenders for the construction of a line from Orel to Narva, 612 miles, at an estimated cost of \$34,065,500.
- No. 8861. Refuse destructor, etc.**—Tenders will be received until June 5, 1912, for the supply and erection of a refuse destructor and steam-raising plant in connection with the electricity generating station, Quadrant Street, Canning Town, for the West Ham town council, West Ham, Essex, England. Plans, specifications, form of tender, and further particulars may be obtained at the office of the borough engineer, Town Hall, West Ham, London, E., England, upon payment of \$4.86, which will be returned upon receipt of a bona fide tender. The contractor will be required to enter into a bond, with one surety, for the performance of contract. Rate of wages, etc., clause to be observed.
- No. 8862. Purification of water supply.**—The Canal Commission, Madrid, Spain, will receive tenders until July 31 for a scheme for the filtration and purification of the Madrid water supply. Particulars from the Junta del Canale 11, 3 Calle Alarcon, Madrid, Spain.
- No. 8863. Motor generator and generator sets.**—The Railways and Tramways Department, Sydney, Australia, will receive tenders until July 1 for one 200-kilowatt motor generator set; until July 15 for two 120-kilowatt motor generator sets. Specifications Nos. 342 and 344 may be obtained of the Electrical Engineer, Hunter Street, upon payment of 60 cents.
- No. 8864. Letter-box fronts.**—Tenders are invited until June 5, 1912, for the supply to the Postmaster General's Department in Queensland of letter-box fronts. Tender forms and specifications may be obtained at the Commonwealth Office, 72 Victoria Street, London, S. W., England.
- No. 8865. Cable.**—The Postmaster General, Melbourne, Australia, will receive tenders until June 18 for 50½ miles paper-insulated lead-covered cable (No. 717).

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 652. Ordnance supplies.**—Sealed proposals in duplicate will be received at the office of the Chief of Ordnance, United States Army, Washington, D. C., until June 1, 1912, for furnishing and delivering f. o. b. contractor's works various ordnance supplies required. Drawings and prints covering these articles can be obtained from the office named.
- No. 653. Panama Canal supplies.**—Sealed proposals in triplicate will be received at the office of the General Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., until June 7, 1912, for furnishing lumber, balcony railings, stair balustrades, elevator inclosures, grille for cashier's office, and steam road roller. (Circular No. 710.)
- No. 654. Filing furniture.**—Sealed proposals for furnishing filing furniture for the Department of the Interior during the fiscal year ending June 30, 1913, will be received until May 27, 1912. Blank forms of proposals containing specifications and necessary information can be obtained by applying to the Secretary of the Interior, Washington, D. C.

VENEZUELAN TRADE NOTES.

[From Consul Thomas W. Voetter, La Guaira.]

New Vessels for Netherlands' Line to Americas.

The Dutch Royal West Indies Mail Line is having built two steamers for its service from Amsterdam to New York via Suriname, Venezuelan ports, Curaçao, and Haiti. These steamers will be of slightly greater capacity than the *Oranje Nassau*, now the largest steamer on this line, of about 3,000 tons net. The new steamers will have smaller accommodations for passengers than the *Oranje Nassau*, and it is expected that the first one will be ready for service by the end of this year.

New Cable—Low Water in Orinoco.

An item in the *Gaceta Oficial* states that the Ministro de Fomento, at Caracas, is to purchase and install a new submarine cable between Puerto Miranda and San Fernando de Apure in the Apure River to replace one that is unserviceable.

A clipping from a Ciudad Bolivar newspaper states that recently the water level in the Orinoco has been the lowest on record. Two causes are given. One is the long dry season, while the second is stated to be that more water is now passing to the south through the Casiquiare to the Rio Negro, a tributary of the Amazon. It is reported that the channel of the Casiquiare is now much wider than before in the part where it touches the Orinoco.

New Industries—Wagon-road Construction.

An item in the *El Tiempo*, of Caracas, of April 29, states that the stock company *Fabrica de Vidrio y Cristal* will establish the following industries: A soda factory for making glass, one for calcined potash, and a third of crystallized sulphate and construction of a continuous oven for finishing dark glass.

A wagon road is being constructed from near Maracay, a railroad station between Caracas and Valencia, northward to the coast at Ocumare. There is a port at Ocumare at which the coasting steamers now touch. When the new road is completed much cacao and coffee which now goes by rail to La Guaira or Puerto Cabello will be brought to Ocumare and taken by boat thence to one of the two ports mentioned. The use of automobiles to transport the cacao from Maracay to the new port at Ocumare is contemplated.

Metal Goods for China.

Consul General Samuel S. Knabenshue, of Tientsin, states that there is a fair demand in China for sheet metal, especially corrugated galvanized iron, and the outlook is for a large increase in the trade, as business becomes settled. Spanish tile, metal shingles, and steel ceilings have not yet been introduced at Tientsin, but a demand could probably be created if an agent were to bring them to the attention of builders.

Resin imports at Manchester, England, amounted in 1911 to 6,761 tons, or about the annual average, of which 90 per cent is American.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

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INDUSTRIAL REVIEW OF UNITED KINGDOM.

[By Consul General John L. Griffiths; supplementing the commercial review published in Daily Consular and Trade Reports for May 22, 1912.]

Increased Earnings of the Railways.

There was a great deal of unrest among railway employees in the United Kingdom in 1911, and in August a strike was inaugurated, but it was not as general or as prolonged as anticipated. Notwithstanding the handicap of strikes, there was almost continuously throughout the year an increase in the gross revenues of the British railways. In the first six months of the year there was an increase in the total revenue of 12 of the leading companies of about \$7,299,750. The expenses during the same period advanced about \$3,406,550, leaving a net gain of \$3,893,200. The second half of the year the strikes occasioned a loss in gross revenue of about \$2,433,250. Increased dividends were paid by a number of the English companies for the first six months of the year, and the five leading Scotch railways increased their gross revenue in comparison with 1910 by about \$535,315.

There was an absence in 1911 of any large new issues of British railway capital, and practically nothing was done in the way of extensions or the building of new lines, but several amalgamations were effected and additional working arrangements between certain railways consummated. The use of electricity in the metropolitan and suburban services was extended.

During last year there was an increased inclination to abolish second-class fares on a number of the railways, leaving only two classes—first and third. The year closed with a promise of good traffic and improved dividends.

Real-Estate Market—Aeronautics.

The real-estate market was much better last year than in 1910, which was one of serious depression. A great number of large estates were subdivided and put on the open market, and there was a growing disposition to lease or purchase these properties. The increased cost of living in the large cities and cheaper traveling facilities continued to accelerate the movement to the country. Residences from 30 to 50 miles from London were in greater demand than ever. On the other hand, manufacturers who advocated locating

their works in the country are discovering that while the operating rates are lower outside of the large cities, there is, nevertheless, a decided advantage in being located where labor can be easily procured.

A growing interest was manifested in aeronautics last year. An announcement was made that it was the intention of the Government to proceed immediately with the training of 100 officers as military pilots and observers. Machines for these airmen will be provided after a thorough test of military aeroplanes under the supervision of the War Office. The trials will be open to the manufacturers of all countries, the primary purpose being to secure the best machine for military use, special attention being given to its portability, speed, and weight-carrying capacity.

The Electrical Industry and Trade.

Last year the electrical industry experienced a large measure of prosperity in the United Kingdom, so far as the output was concerned, but it is claimed that price cutting was so general and severe that the returns from dynamos and motors fell to a point where they could not be sold at a profit. As a result of the recent coal strike, attention has been widely directed to the use of electricity for motive power, lighting, cooking, etc. The manager of one of the electric companies in London stated recently that his company had orders for nine months ahead for motors, which would tax the full capacity of its works. The electrification of railways was carried on to a greater extent in 1911 than in the preceding year, especially in London and the north of England.

There was an increased demand for electric equipment in consequence of the improvement in the shipbuilding trade. A series of interesting and successful trials was made with a small electrically driven vessel on the Clyde, and those who were familiar with the experiments believe that large cargo ships will soon be built on the same principle.

Electrical goods and apparatus other than machinery and telegraph and telephone wire were imported to the value of \$6,311,110 against \$7,236,884 for 1910. The exports of these goods were valued at \$13,561,182, against \$18,015,811 in 1910, of which \$12,687,218 and \$17,093,882, respectively, represented British products. The imports of electrical machinery amounted to \$4,743,022 for 1911 against \$2,531,991 for 1910, and the exports of British manufactured machinery were valued at \$7,975,458 and \$7,088,592, respectively.

Operation of Tramways—Business Failures.

The capital expenditure of the tramways in the United Kingdom has grown from \$20,475,000 to \$368,260,000 within the past 20 years, the number of passengers transported from 146,000,000 to 2,907,000,000, and the net receipts from \$1,221,000 to \$25,675,000. Of 1,744 miles of line belonging to local authorities at the end of March, 1911, 1,530 miles were operated by themselves, or in a few cases by other local authorities leasing from them. Of the 2,597 miles of tramways in operation, 2,467 miles were electrified. Of the 296 tramways in the United Kingdom, 174 belong to local authorities, and the net receipts from these amounted to \$18,733,000, of which \$5,736,600 was applied to the reduction of tramway debt, \$1,802,722

to the relief of rates, and \$4,324,562 was carried to reserve and renewal funds.

The number of failures in the United Kingdom in 1911 aggregated 8,359, against 9,040 in the previous year. The total liabilities under deeds of arrangement in England and Wales were \$21,336,322, against \$18,369,826, while the assets equaled \$10,164,829, against \$9,448,927. Liabilities under deeds of arrangement in Ireland in 1911 were \$1,902,281, against \$1,800,809 in 1910, with the assets at \$896,614, compared with \$1,173,571.

Increased Cost of Living—Unemployment.

The labor troubles, which were so serious at times in 1911, were due in a great degree to the increased cost of living and the feeling on the part of wage earners that there had not been a corresponding increase in wages. Rents and almost all commodities which entered into the general cost of living of the average family were higher in 1911 than in 1910. In 45 representative commodities the average price was 2 points higher than in 1910, 6 points higher than in 1909, and 10 points higher than in 1904. Articles of food were 10 per cent higher at the close of 1911 than at the close of the previous year. In vegetable food, corn, etc., there was a rise in value of 18 per cent as compared with 1910; of 28 per cent in the price of sugar, coffee, and tea; a decrease of 1 per cent in the price of animal food (meat and butter), and a decrease of 10 per cent in the price of textiles.

Returns relating to about 800,000 members of trades unions in the United Kingdom showed a falling off in unemployment in 1911 of 1.7 per cent compared with 1910 and 4.7 per cent compared with 1909. In reviewing the labor conditions of the year the British Board of Trade stated that employment in the woolen and worsteds, carpet, hosiery, bleaching, dyeing, pottery, and woodworking trades was generally good.

Wages and Hours of Labor—Emigration.

There was a slight increase in wages paid in 1911, the net effect of all the changes being an increase of \$126,173 a week in the wages of 825,204 people. Of this number, 416,191 received a net increase of \$183,291 per week, and 399,216 sustained a net decrease of \$57,118 per week.

The changes in weekly hours of labor which became operative in 1911 affected 105,537 working people. Of this total, 4,337 had their hours increased by 13,905 per week and 101,200 had reductions amounting to 574,140 hours a week. There were 864 trade disputes, involving 931,050 people, being about 9 per cent of the total industrial population of the United Kingdom, excluding agricultural laborers, and the time lost was 10,247,100 days, of which 4,072,400 days were on account of those engaged in coal mining and 2,698,400 days by those employed in the transport trades.

Last year 349,300 persons, of whom 315,800 were British subjects, left the United Kingdom for various parts of the Empire, against 293,700 in 1910. Of this number 213,300, compared with 196,300, went to British North America, and 69,000, against 36,300, to Australia. The emigration to foreign countries declined from 325,200 in 1910 to 274,000 last year, the number leaving for the United States being 250,900, compared with 303,400 for 1910.

Patent Applications and Foreign Investments in Plants.

Applications for patents to the number of 29,353 were filed in the United Kingdom in 1911, which was a decrease of 1,035 compared with 1910. The largest class of patent applications related to motor cars. Another subject which occupies the attention of many British inventors is petrol engines. Several of the engines were designed for aeroplanes. Inventions relating to aeronautics, games, electrical devices, and advertising were prominent among the applications filed.

A large number of foreign manufacturers have established plants in the United Kingdom in order to be protected by the patents and designs act, which provides that the Comptroller of Patents is authorized, upon proper proof, to revoke within a given time any patent granted in the United Kingdom upon the ground that the patented article or process is manufactured or carried on exclusively or mainly outside of the United Kingdom. The effect of said clause is shown in the following foreign investments for 1911: Value of land and premises acquired, \$1,060,362; amount expended on buildings, machinery, etc., \$4,132,056; amount paid as rates per annum, \$107,063; number of workpeople employed, 9,000; weekly wages, \$48,665; number of foreign firms working, 60; and number of English firms manufacturing for foreign firms on royalty basis, 35.

Economic Legislation Enacted.

A great deal of what may be described as social and commercial legislation was enacted by the British Parliament last year. Several changes were made in the old-age pensions act which greatly enlarged its scope. A stringent coal-mines act was passed which provides for the improved ventilation of mines, closer managerial supervision, restrictions in reference to the use of electricity and in regard to safety lamps, measures of dust prevention, new arrangements to prevent accidents to cages, etc. Under the shops act all shop assistants, except where the special conditions of certain trades render it impracticable, are assured of a half-day holiday in each week and of sufficient time for their meals. Laws were passed dealing with humidity and ventilation in cotton-cloth factories for the purpose of improving the conditions surrounding the employees in that great industry. A law was enacted which was described as a "temporary measure for the protection of the public against dangers arising from the navigation of air craft." The design of this law was to prevent the sailing of air craft over large cities, and to regulate their use so as to permit experimental work to be conducted and yet at the same time to safeguard the public. Laws were enacted for the purpose of promoting the interests of agriculture, forestry, and other rural industries in Scotland. A law was passed to prevent the use of fraudulent trade-marks on imported goods, and the copyright law was revised. Further protection was extended to animals by the passage of a law fixing a maximum penalty of \$121 instead of \$24 for cruelty to animals and extending the term of imprisonment from three to six months.

The most important measure was the national insurance bill, which becomes operative on July 15, 1912, and which will benefit about 14,000,000 persons. The act provides a scheme to which the

State, the employer, and the employee contribute in varying proportions for the furnishing of medical benefits and to cover periods of unemployment. An important feature of the bill is the provision which it makes for the establishment of sanitariums for the treatment of tuberculosis which is one of the most dreaded diseases in the United Kingdom. [The provisions of the national insurance bill were printed in the Daily Consular and Trade Reports for June 28, 1911.]

Government Control of Telephone Lines, and Telegraph and Cable Service.

At the close of last year the property of the National Telephone Co., which was capitalized at \$77,864,000 and gave employment to 18,000 persons, passed under Federal control, and by the transfer private telephone ownership, excepting a few isolated lines, ceased in the United Kingdom. A night telegraph letter service was instituted January 1, 1912, between London and points in Scotland and Ireland at the rate of 12 cents per 36 words and 1 cent for every additional 3 words. Toward the end of last year a week-end cable service was inaugurated between the United Kingdom, the United States, and Canada at greatly reduced rates. Improved telephonic communication with the Continent was established by the completion of the new channel cable.

Introducing American Goods on the English Market.

A gratifying feature of the work of the London consulate general last year was the knowledge that the office was being brought into close touch with the American exporter. An increased number of letters were received expressing appreciation of information furnished, with an intimation in several instances that it was believed valuable business connections would be formed.

When the American manufacturer has decided that he wants to enter the English market he should, if he expects to do business throughout the country, communicate with the consul general in London, or if he intends to confine his sales to a particular locality, with the consular representative in that special district. He will be informed through this channel of the general conditions of the trade in the United Kingdom as affecting the article or product in which he is interested; the extent of the demand; the character and source of the supply, embracing not only the domestic production but the imports from abroad; the prevailing prices; and the names of persons who would be pleased to enter into correspondence with him. If the preliminary information is satisfactory, then he should, whenever it is possible to do so, send a personal representative to make an exhaustive examination of the local conditions. If after this is done the manufacturer still thinks that the foreign trade will be profitable, three courses of action are open to him. He can secure an agent who represents other manufacturers, or a sole agent, or establish a central office or business house, preferably in London, with branches, if necessary, in the principal cities of the United Kingdom. The agent who represents a number of interests is certainly not as desirable as one who will give his undivided time, knowledge, and energy to a single employer. In the case of typewriters, cash registers, motor cars, motor cycles and bicycles, sewing machines, pianos, and all kinds of machinery, it is most desirable to have a central London

establishment and to organize branches as the extension of the business may require.

Emergency Orders, Prices, Packing, etc.

There should always be a sufficient stock in the United Kingdom to supply emergency orders and to provide parts of machines which may be damaged and which have to be quickly replaced to avoid serious inconvenience and loss. Prospective purchasers of machinery almost invariably ask if duplicate parts can be readily obtained. All prices should be given in British currency, and all weights, dimensions, and measures in British equivalents. Special attention should be paid to packing. Goods must ordinarily be sold on the terms of credit, which are governed, of course, by local custom. Export trade can only be retained by prompt and regular deliveries. It is useless to expect to hold it if it is regarded simply as an opportunity to dispose occasionally of surplus stock. It must be treated with the same consideration as the home market, and indeed it might almost be said with greater consideration because of the difficulty in correcting mistakes. The American manufacturer must not be easily discouraged. The London manager of an American house some time ago remarked that during the first three years after its establishment he had been unable to meet expenses, but that during those three years he had advertised judiciously and in every way sought to bring his goods to the favorable attention of possible consumers, and in the fourth year he was able to report a successful result. The length of time required to establish the business was due in part at least to English conservatism, and this conservatism is a factor which must be considered. The English buyer is reluctant to form new alliances, but when he does he is equally reluctant to change them.

The published statistics of the trade of the United Kingdom show that nearly one-quarter of all the imports into the country from foreign countries (excluding British possessions) comes from the United States, and that nearly one-fifth of the total imports from foreign countries (including British possessions) comes from the same source. It is indeed a good market, a growing market, and a market worth striving for.

SAMPLE EXHIBITIONS IN TURKEY.

[From Consul General George Horton, Smyrna.]

The sample exhibition which the British Chamber of Commerce here plans [as noted in Daily Consular and Trade Reports for May 9] is intended to be run entirely in the interests of British import trade to Smyrna. It is proposed to rent a large store in a central part of the town where exhibits can be displayed, thus giving to the exhibitors all the advantages of advertisement at a comparatively small cost. The exhibition will undergo constant change through renewals, improvements, and additions, and the visits of commercial travelers will be encouraged.

The Société Hongroise de Banque et de Commerce has already established showrooms on the above lines for the development of its interests; the exhibit, however, consists solely of such articles as are manufactured by business houses which it represents. Judging from all appearances its scheme is a decided success.

NEW BREWERY IN CHINA.

[From Vice Consul General W. Roderick Dorsey, Shanghai.]

The first brew from Shanghai's new Union Brewery was placed on the market April 1. It was established by an old firm of Tsingtau, is three stories high, and constructed of brick and concrete. It cost \$180,000 gold and is the first brewery in Shanghai. Plans for the plant were sent out from Germany early last year, and construction work was carried on under the direction of a local German architect. Living quarters are provided for the brewing master and offices fitted up for the foreign staff.

Prior to starting the enterprise samples of Shanghai water were sent to Berlin and were pronounced by Prof. Wintisch, of the Royal Brewing Faculty, to be equal in quality to water used in Germany for brewing purposes.

The hops and malt, which are imported from Moravia, are brewed in two large vats and pumped into tanks on the roof, whence the beer flows over cooling pipes into other tanks on the ground floor, where it remains for a day, and is pumped into vats connected with the refrigerating plant. Here, after fermenting for 10 days, it is placed in barrels in cold storage and left for three months. The installation was completed in December, when brewing commenced. The brewery opens, it is said, with 40,000 gallons of beer, the plant's full capacity. Two kinds of beer are produced, one similar to Pilsen, the other to Munich.

A 60-horsepower engine operates the machinery and also a private electric plant. The kegs have been brought from Germany and the bottling department is equipped with the latest washing and sterilizing appliances. The bottles are purchased in Shanghai and the company claims to have a million on hand.

[The failure of a brewery in Hongkong was related in Daily Consular and Trade Reports for May 13.]

A COMPLAINT FROM ROUMANIA.

[From American Minister John B. Jackson, Bucharest.]

The following incident shows the manner in which a sentiment prejudicial to American trade generally can be brought about by the ill-considered action of a single exporting house.

Some months ago an energetic American salesman representing a tool and hardware company came to Roumania and was successful in placing a number of orders. The local houses counted on receiving the goods ordered in accordance with the terms of the contract and made their arrangements accordingly. Recently—not long before the arrival of the goods had been anticipated—the agent here of the American house received a telegram to the effect that “freight charges make compliance with the contract impossible.” Owing to the vigorous protest of the agent, the manufacturer has ultimately consented to send a part of the goods ordered, but these shipments will arrive late and the local houses will be subjected to considerable embarrassment and will be obliged to replenish their stocks from other sources, which will certainly not be American, and it is doubtful if they will ever again have confidence in representations made by an American salesman.

GRADING PORCELAIN WARE.

[From Consul General Frank Dillingham, Coburg, Germany.]

The quality of a piece of modern porcelain is shown by its outward condition, and different classes of customers lay varying degrees of value on the outward appearance of the article, depending on their taste and their station in life. In Germany porcelain articles are sorted into four different grades—good wares, middle wares, fair wares, and poor wares. In grading porcelain, especially table ware, there is, besides these four classes, usually a fifth, known as “bruch,” or breakage.

As articles coming under the first group are only the exceptionally fine, porcelain sold as being first grade is usually sorted so as to run from first to second grade. Purchasers and consumers now understand more about the different grades of porcelain than formerly and expect such a good quality even in the third grade that a higher class of excellence is scarcely possible. Consequently the term “third selection” is really generally understood in business circles as meaning a good or better grade of porcelain ware.

The fourth grade means about the same as defective ware, although this is a very good selling article for the tableware factories that supply the German home market, and, being of a somewhat better quality than usually comes under the heading “fourth class,” could really be called a medium quality. The poorest assortment bears simply the name “breakage.” Strictly speaking, this title is not applicable, for broken articles are not even salable. The characteristics of such breakage may be small, or sometimes larger, cracks in the rims or edges, out of shape or very yellow ware, pieces streaked or discolored with iron, etc.

Export Ware—Cost of Manufacture.

The manner of sorting china described is usual when supplying the home market, but wares intended for export are really the unsorted articles, just as they are taken from the kilns, after the removal of the poorest quality. Classification for the export trade is therefore the simplest.

Prices for the different grades can be found by following the general rule for sorting goods. The following calculation represents the cost of manufacturing 12 table plates, 25 centimeters (9.84 inches) in diameter:

	Cents.
Raw materials.....	8
Wages.....	6
Burning, including cost of work.....	16½
Expenses of management (40 per cent).....	12
	<hr/> 42½
Breakage in kiln.....	1½
Other breakage.....	4½
Loss in bad ware.....	2
	<hr/> 8
Total.....	<hr/> 50½

The cost price of a dozen unsorted plates would therefore be 50½ cents. Assuming that the factory manufactures a table plate that is up to the quality made by the average factory, 2 out of every 100

would probably come under class 1, 10 under class 2, 30 under class 3, and 58 pieces under class 4.

Prices of Different Grades.

Approximately the prices of the various qualities would be 50½ cents per dozen unsorted, equaling 4.2 cents per piece or \$4.20 per 100 pieces. This, divided into grades, would be as follows:

2 pieces, first quality, at 8.5 cents.....	\$0.17
10 pieces, second quality, at 6.2 cents.....	.62
30 pieces, third quality, at 4.75 cents.....	1.42
58 pieces, fourth quality, at 3.44 cents.....	1.99
Total.....	4.20

A profit or gain is not included in the prices of the plates, and must therefore be added to the foregoing figures.

HANDBOOK FOR THE GERMAN EXPORT TRADE.

[By Commercial Agent Archibald J. Wolfe.]

The German Foreign Office has issued a handbook entitled *Handbuch für den Deutschen Aussenhandel* (Handbook for the German Export Trade). It outlines the activities in behalf of German commerce in which German consuls and other consular officials are permitted to engage and the services which they are expected to perform. The handbook contains nearly 400 pages and is divided into 10 sections; in the future it will be issued annually.

The German consular officers are expected to furnish information regarding sources of supply for raw materials and agricultural and industrial products of foreign countries, and to give opinions on the chances of selling German goods abroad. They supply the names of agents abroad and give information regarding the standing and trustworthiness of foreign customers, the state of foreign markets, and general economic conditions.

Persons making inquiries of consuls regarding prospects for German goods are urged to be concise, but to give all details. A model letter of inquiry is given. It is urged not to send inquiries of a similar nature to several consulates in the same country. The inquirer is expected to reimburse the consul for actual outlay. When this is not done the consul is paid from a fund kept for the purpose by the chambers of commerce in Germany. All the chambers of commerce but two keep such a fund; not more than 30 to 50 marks are paid out for any one case.

The German consular service maintains commercial attachés in a number of foreign cities. These are officials permanently stationed at their posts and devoting their time exclusively to the care of German commerce in their districts. There are also a number of agricultural attachés.

Considerable space is devoted to special information relating to the practice of each consulate in dealing with inquiries for credit reports, collections, and requests for agencies, and attention is given to costs of litigation, credits, etc. Two sections are devoted to tariff matters. There are lists of German consulates and of the consulates to which are attached the commercial and agricultural experts. There is also a list of the commercial and agricultural organizations in Germany.

COMMERCIAL VALUE OF A LANGUAGE.

[From Consul P. Emerson Taylor, Stavanger, Norway.]

Practically all the letters sent by American exporters to Stavanger importing firms are written in English. This consulate is frequently called upon to assist in interpreting some of the correspondence; and in this way, as well as by direct correspondence between American firms and the consulate itself, it is noticed that the letters of American exporters quite frequently contain the following statement and similar ones: "We must insist that your reply to our letter be in the English language, as this firm has no facilities for translating letters from the Norwegian to the English language."

The American firms have invariably been informed that, while the larger importing firms of the district have English correspondents, the smaller houses do not, and that correspondence with both classes will undoubtedly receive more prompt and careful consideration if the American writer at least accords to the Norwegian the same courtesy he claims for himself, namely, the privilege of writing in his own language. While most importing merchants here read English fairly well, it is much more difficult for them to write it. It may not in all cases be practicable for American firms to secure translations of the Norwegian letters; but those American firms which are considerate enough either to leave to the prospective purchaser the matter of the language to be used in the reply or to indicate that a reply in either English or Norwegian will be acceptable are the firms whose business letters are receiving the most attention and bringing them the most business. The small amount of money thus necessarily expended in securing the translation of letters will be more than made up in the saving of correspondence from which no results whatever are obtained.

Catalogues in English a Waste of Money.

The same is to some extent true of circulars and catalogues. Of the scores of catalogues received at this consulate monthly not one in a hundred is in the Norwegian-Danish language. The result is that few of them are ever consulted in the consular files. This consulate more than a year ago began loaning and delivering catalogues by messenger to the leading importers, and some orders for American goods have been secured in consequence; but notwithstanding the consulate informs the recipient upon delivering the catalogues of its willingness to aid in the translation of language and prices as to any goods in which the firm may be interested, there have been comparatively few requests of this kind.

Of course the publication of entire catalogues in Norwegian is in most cases impracticable and inadvisable because of the limited market of the two countries using the language; but certainly much better results would be obtained if firms endeavoring to secure business here by correspondence would first ascertain which particular kinds of the goods they handle would be best adapted to and most in demand in this market and then send merely a pamphlet or leaflet in the Norwegian language limited to descriptions, prices, and illustrations of such goods.

The present system of sending large and comprehensive catalogues in English, many of them expensively and elaborately prepared for English readers, is a tremendous waste of time, material, and postage.

They are strange, confusing, and bewildering to the average Scandinavian buyer, and, with his meager knowledge of English, he seldom takes the time and trouble to find the particular goods he wants. A small leaflet in his own language, treating only of the class of goods in which he is especially interested and illustrated with some of the cuts from the large catalogue, will, at one-tenth the expense of the large English catalogue, accomplish more.

Pamphlets in the Norwegian Tongue.

The consulate has endeavored to devise some way of interesting local buyers in the English catalogues filed in the office, but the plan of loaning them to merchants and importers seems to be bringing better results than any other tried. It enables the consular employee to point out to the dealer the articles shown in the catalogue which are believed to be of the kind he may want, and to assure him personally of a willingness to aid him in securing any information he may desire, both as to the contents of that particular catalogue and as to American goods in general. Results from this method have been encouraging.

It is believed, however, that for those American firms whose business is not such as would warrant the publication of a special catalogue for Norway and Denmark the adoption of a Norwegian-Danish loose-leaf or pamphlet plan of supplementing correspondence is the best business-getting substitute for the visit of the traveling salesman, which for most American exporters is impracticable in Scandinavia.

MANGANESE ORE IN WEST INDIES.

[From Consul F. T. F. Dumont, Base Terre, Guadeloupe, French West Indies.]

In the exhaustive 300-page Bulletin 427 issued by the United States Geological Survey on "Manganese Deposits of the United States, with sections on Foreign Deposits, Chemistry and Uses," the following statement appears:

A bed of manganese ore of superior quality is reported from the island of St. Martin in the West Indies, and another deposit has recently been found in Haiti.

Mining geologists having made inquiry about the St. Martin deposit the following statement has been secured from its owner:

This deposit is at Cay Bay in the Dutch part of the island, not far from this town of Philipsburg and quite near the sea. Some 10 or 12 years ago two shipments of manganese were made from this place to New York and sold readily, the analysis showing about 44 or 45 per cent manganese. Not long ago the deposit was visited by a Dutch Government engineer, whose opinion of the same was quite favorable. Though there are outcrops of manganese in various parts of the island, Cay Bay is the only place from which ore suitable for shipping has been obtained.

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.

The Khedivial Agricultural Society of Egypt is arranging to import extensively commercial fertilizers, for which \$500,000 has been advanced to it by the National Bank of Egypt.

COST OF LIVING IN A SPANISH CITY.

[From Vice Consul Harris N. Cookingham, Seville.]

Not only the native Spaniards in Seville, but also the foreign residents, are confronted by the high cost of living here. Local conditions are peculiar and a foreigner is inclined to feel that luxuries are sometimes cheap and necessities invariably expensive.

Competition among the wage earners of Seville is great enough to keep wages at a minimum; wharf laborers, for example, receive from \$0.36 up a day for handling cargo, while tram guards and motormen receive \$0.54 and up. Bank clerks receive from \$12 a month up. With such earnings the poorer working people are unable to afford much that those in similar employment in the United States regard as indispensable, and local living conditions are for the most part somewhat primitive. The houses seldom have adequate sanitary arrangements, and even the homes of the well-to-do often lack modern bathrooms.

Housekeeping Costs—Clothing—Luxuries and Travel.

A good house, well situated, fitted with a bathroom, rents for \$60 a month and up, while an apartment of seven small rooms and bath may be had for \$22.50. Apartments seem to be gaining in popularity, but those in Seville have neither provision for heating in winter nor the other advantages which make American apartments comfortable. House furnishings are, as a rule, expensive when compared with similar articles in the United States, with the exception of wicker furniture and matting rugs, which are made in Seville. A wicker chair costs only \$1.44 and good matting rugs, 3 by 6 feet, from \$0.54 up. Other housekeeping expenses are not excessive. Gas, which is coming into use for cooking and illumination, costs \$0.03 per cubic meter (35.314 cubic feet); electric light costs \$0.18 a kilowatt with discounts, and the water tax averages \$0.90 a month. Servants' wages range upward from \$3.60 a month and board, and it is usually necessary for the most modest household to keep more than one.

The prices of clothing and other personal effects average higher than in the United States. The high duty on woolen cloths, most of which come from England, make woolen suits of good quality expensive, although the price is modified by the low cost of labor for tailoring.

It is interesting to note in comparison the current prices for non-essentials in which Americans at home indulge. Popular amusements cost 4 cents to 42 cents, rarely higher except in the grand opera season. Flowers range from 1 cent for a jasmine or violet boutonniere to 18 cents a dozen for midwinter roses. A good carriage can be hired for 45 cents an hour and tram fares range from 2 to 8 cents, according to distance. Tickets for a 100-mile railway journey, first class (which is often inferior to the ordinary American day coach) bring the mileage cost to 3.6 cents, while a 1,242-mile ticket good for 3 months reduces the cost per mile to 2.4 cents.

Cost of Food.

In considering the cost of food in Seville, the prices must always be compared with the daily earnings of the working people, which are insufficient to allow them many of the articles of food which the American laborer deems necessities. In fact, the laboring class subsists largely upon vegetables, bread, and a little fish (most frequently dried cod). Their typical dish is a broth of chick-peas, rice,

and a few other similar ingredients, including, in their seasons, Spanish sweet peppers, squash, tomatoes, and beans. Fortunately vegetables are inexpensive and are the food of the laboring class.

The prices of some of the common foodstuffs, as purchased in the retail market, are given in the following table, the quantities being 1 kilo (2.2 pounds) unless otherwise stated:

Articles.	Price.	Articles.	Price.
Butter, domestic.....	\$0.63.	Peaches.....	\$0.09.
Cheese, cream.....	.54.	Lard.....	.40.
Chocolate.....	1.19.	Milk, per quart.....	.11.
Coffee.....	.90 up.	Beef.....	.54.
Eggs, per dozen.....	.27 up.	Fowls, small, each.....	.72 up.
Flour.....	.11 up.	Ham.....	.72 to 1.38.
Clams.....	.14.	Olive oil.....	.28.
Dried codfish.....	.23.	Salt, table.....	.04.
Sardines.....	.18 up.	Sugar.....	.21.
Shrimps, per dozen.....	.27.	Wine, table.....	.18 up.
Apples.....	.08 up.	Beans.....	.11 to .36.
Bananas, per dozen.....	.18 up.	Cabbage.....	.05.
Cantaloupe, each.....	.09.	Potatoes.....	.03.
Dates, dried.....	.45.	Rice.....	.10.
Figs, dried.....	.14.	Tomatoes.....	.02 to .18.
Oranges, per 100.....	.72.	Sweet peppers.....	.09 up.

Canned foods are not widely used in Seville and such few canned fruits and fish as are found here are beyond the means of the average consumer. American catsup is 45 cents a bottle and English jellies 36 cents a jar.

MANCHURIAN NOTES.

[From Consul General Lester Maynard, Harbin.]

River Navigation—Pawn Shop.

Navigation opened on the Sungari River at Harbin on Sunday, April 14, the first steamer coming alongside to take cargo on that day.

The Joint-Stock Company for Storage and Mortgaging of Movable Property at Harbin, capital \$25,000, has been organized to establish a lombard (pawn shop).

Australian Wheat in Manchuria.

Samples of the Australian wheat purchased by the Russo-Flour Milling Co. for its mill at Vladivostok, as reported in Daily Consular and Trade Reports for March 12, have been received at Harbin and have considerably interested the Chinese farmers, due to the excellent appearance of the grain, which is large, round, light-yellow in color, and uniform in size, being unmixed; and it is believed that orders will be sent to Australia for seed. The cost of the wheat delivered at the mill was \$35.97 per ton of 2,000 pounds. The average price of Manchurian wheat in Harbin during 1911 was only \$19.40 per ton of 2,000 pounds, but the necessity of importing at such a high price may be partially accounted for by the fact that the Australian wheat is of better quality than the best Manchurian wheat, but is principally due to the shortage of the Manchurian wheat crop on account of floods and also of the heavy calls made on the wheat stores by the famine in western Siberia and the unusually large requirements for the Amur Railway. Had the stocks of Manchurian wheat been drawn upon for the Vladivostok mills, the supply would soon have been exhausted, or the price forced to a prohibitive point, and in either case the mills at both Harbin and Vladivostok would have been shut down had not foreign wheat been imported.

FIRE PROTECTION OF AN ITALIAN CITY.

[From Consul Hernando de Soto, Palermo.]

The fire-fighting force of the city of Palermo, which is maintained by the municipality, consists of 1 chief, 1 assistant chief, 4 adjutants, 8 sergeants, 12 corporals, and 73 men, who receive the following annual salaries during the first six years: Chief, \$772; assistant chief, \$482; adjutants, \$357; sergeants, \$300; corporals, \$260; men, \$166. The officers then are raised to \$868, \$579, \$386, \$328, and \$290, respectively, and after 12 years' service receive further increases of salary to \$965, \$675, \$405, \$347, and \$318, respectively.

In addition to the foregoing regular salaries there are certain extra allowances for clothing and board, and to those officers who also act as paymaster and auditor, assistant accountant, chief engineer, and assistant engineer. A pension is granted after 25 years of regular service, beginning at five-eighths and gradually increasing to a maximum of four-fifths of the last salary received. This maximum is usually reached after 37 years of service. Two and one-half per cent is retained out of the regular salaries for pension purposes by the municipality.

Assistance rendered by the Palermo fire brigade to communities outside the city limits are charged for at fixed rates, and engines and other apparatus may be loaned by the department at stipulated prices. For special watch service, in theaters, concert halls, public balls, meetings, and the like, fees are charged, but the money so received represents a personal compensation which each man may retain for his own use. Excluding extraordinary and unforeseen expenses, the cost of the fire department aggregates \$28,000 per annum—\$23,800 for salaries, \$2,100 for maintenance and repair of engines and implements, and \$2,100 for maintenance of premises and miscellaneous expenditures.

Equipment—Water Supply.

The equipment consists of:

One automobile for first help, of Italian make, type "Lancia," 25 horsepower. Principal pieces of equipment—ladder in 4 sections, 2 chemical extinguishers, tools, 300 meters (984 feet) of hose. Cost of the automobile, \$2,300.

One automobile fire engine of French make; motor of Dietrich type and pump constructed by Drouville Frères, Nancy; 4 cylinders, 40 horsepower. Pieces of equipment—2 hook ladders, 2 chemical extinguishers, rope, tools, 980 feet of hose, 50 torches, 3 safety lamps; cost, \$5,400.

Two steam fire engines, French make, A. Thirion Fils, Paris; 2 cylinders, 6 horsepower; cost, \$1,650 each.

Three extension ladders, height 82 feet, one revolving, of German make (system Schmal); and two fixed, of Italian make (Paolo Porta, Milan).

Two 2-wheel horse vehicles for first help, equipped with hand pump, ladder, hooks, tools, hose, etc.

Two 2-wheel horse-drawn vehicles for first help, equipment similar to the foregoing.

Eight hand pumps, French make, each 590 feet of hose; 6 hand pumps, German make, each 590 feet of hose; 1 hand pump, Italian make, 590 feet of hose; 2 hose carts with 984 feet of hose each; 1 air pump feeding 6 air tubes, this apparatus being particularly adapted for fires in sulphur mines, which occur frequently; 22 bicycles; 1 handcart with 4 chemical extinguishers. Total length of hose, 16,404 feet.

The above apparatus is at the central station. The other three stations in Palermo are equipped each with 1 hand pump and 1 hose cart.

There are 835 hydrants in Palermo of 45 millimeters (1.77 inches) diameter and 6 of 70 millimeters (2.655 inches) diameter. The

pressure is 3 to 6 atmospheres, by which water can be thrown to a maximum height of 196 feet.

Heating and Cooking Methods—Fire Statistics.

The city of Palermo has 360,000 inhabitants. The houses do not exceed four stories in height, the larger percentage having only two stories. They are all built of stone, including staircases and floors in all the flats. On account of the mild climate, the temperature seldom dropping as low as 40° F. during a few weeks in January, heating is almost unknown; and with the exception of the hotels, the opera house, and a few private residences, provided with steam heating appliances, not one building has a chimney. Cooking is usually done on gas or petroleum ranges, or in the old-fashioned Sicilian way by means of charcoal placed in small, square holes on the hearth and fanned into a blaze.

Fires destroying a whole block are entirely unknown, and it seldom occurs that an entire house burns to the ground. Fires are usually confined to the room or floor in which they originate. During the three years from 1908 to 1910 there were 338 fires in Palermo and 28 in neighboring communities, entailing a total loss of \$90,000. Of these, only 48 were of a comparatively serious character, 78 of medium importance, and 212 insignificant.

ORE SHIPMENTS FROM GERMAN SOUTHWEST AFRICA.

[From Ambassador John G. A. Leishman, Berlin, Germany.]

The following statement of the movement of ores from German Southwest Africa was prepared by the Imperial Colonial Office:

Countries.	Ores.			Lead, raw, in bars, or rolled.
	Raw copper.	Concentrated copper.	Other.	
1910.				
United States.....	<i>Pounds.</i> 24,081,211	<i>Pounds.</i> 5,596,984	<i>Pounds.</i>	<i>Pounds.</i> 534,356
Belgium.....	50,153,846			1,397,157
Cape Colony.....			190	
Germany.....	3,633,610	1,149	45,717	3,854,391
United Kingdom.....			130	
Total.....	77,878,667	5,598,133	46,037	5,785,904
1911. ¹				
United States.....	7,755,266	873,030		
Belgium.....	36,382,277	552,567	19,850	1,556,598
Cape Colony.....	273		121	
Germany.....	1,822,156		18,603	
United Kingdom.....	176		24,101	
Total.....	45,960,148	1,425,597	62,675	1,556,598

¹ These figures are for the 9 months from Jan. 1 to Sept. 30.

Practically all of the foregoing shipments were made via Swakopmund.

As supplementary to the above information, Consul General Richard Guenther, of Cape Town, British South Africa, reports: "The shipments of the working mines of the Otavi Mines & Railroad Co. amounted, from April 1, 1910, to March 31, 1911, to 40,400 tons. Of this amount, Tsumeb contributed 36,000 tons, and the mines in the Otavi Valley (Asis, Guchah, and Great Otavi) the remainder."

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8868. Men's shoes.**—An American manufacturing firm writes to the Bureau of Manufactures that one of its customers in a South American country has requested to be placed in communication with American manufacturers of men's shoes. Correspondence should be addressed to the firm making the inquiry as soon as possible.
- No. 8867. Fur skins.**—A leading furrier of east Germany informs an American consulate that he desires to hear from only the best and most reliable American exporters of raw and dressed lamb, sheep, skunk, and mink skins, who are in a position to furnish large quantities. He has had dealings with firms in the United States, and his request has particular reference to the reputation for solidity, fair dealing, and careful attention to the filling of orders, as he does not care to be put to the delay and expense of returning unsatisfactory goods. Correspondence may be in English.
- No. 8868. Upholstering material.**—An American consul in a European country reports that an agent in his district desires to establish connections with exporters of upholstering materials, such as Spanish moss and horse hair. He would also be interested in neat hides and leather. He wishes to sell on a commission basis and confine his activities to the taking of orders from domestic consumers, neither goods nor payments to pass through his hands. Correspondence should be in German, if possible.
- No. 8869. Can-making machinery and oil-mill equipment.**—American manufacturers of can-making machinery are requested to furnish catalogues, prices, with daily output and other estimates, for cans to be used in the preserved-pineapple industry. The specifications should be accompanied by a guaranty that the cans will be made air tight without the use of solder, if possible. The American consular officer submitting this report also states that catalogues and quotations are desired for a complete oil-mill plant capable of handling 1,680 pounds of copra per hour, with a guaranty of the extraction of 60 per cent of oil. The quotations should not include engines and boilers; in other words, the propelling power. It may be of interest to American firms to state in this connection that estimates have been furnished by an English concern for a plant handling 1,120 pounds per hour at a cost of about \$22,000 and by a German factory of plants handling 3,000 and 4,500 kilos (6,614 and 9,700 pounds) at \$7,400 and \$8,500, respectively.
- No. 8870. Hotel.**—The Bureau of Manufactures is in receipt of a communication in which the writer, who is connected with an American business house, states that while on a recent trip to Central America he discussed with a Government official the prospects for establishing hotels there. He was assured of the good will of the Government to assist some enterprising concern in putting up a modern and up-to-date hotel. In the opinion of the writer this project would prove profitable; further particulars can be obtained by addressing him on this subject.
- No. 8871. Marine and stationary motors.**—It is the intention of an organization under a foreign Government management to enter the field of selling motors, both marine and stationary, the idea being to establish selling agencies at various points in the country. Correspondence is desired with American firms manufacturing this type of motor with a view to securing the sole agency. To properly introduce the motors it would be desirable to have the first motor shipped on consignment in order to display the same. This machinery will have to be sold on time, and arrangements must be made whereby the manufacturer will accept part payment in cash, balance to be extended to a certain period. Correspondence and printed matter should preferably be in Russian, and should be addressed to an official whose name is furnished.
- No. 8872. Cottonseed oil.**—An American consul in the Near East reports that a firm in his district is desirous of securing the exclusive agency of a first-class American cottonseed-oil exporting house for a certain section of a country.

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USE OF SPRAYING MACHINES ABROAD.

SPAIN.

[From Consul Robert Frazer, Jr., Valencia.]

International Competition of Insecticides and Sprayers.

Under the auspices of the Ministry of Fomento (Agriculture, Public Works, etc.), an International Competition of Insecticides has been held in this orange-growing zone during the past 14 months and the awards of the jury of experts that directed the experiments have now been issued. Three money prizes (\$500, \$300, and \$200) were offered and four applications or sprayings were allowed to each competitor.

The principal object of the agricultural authorities who organized the competition was to discover, if possible, an efficacious and cheap remedy for citrus scale pests and to warn fruit growers against the employment of useless or harmful insecticides of unknown composition among the many that are offered for sale. The possibility of finding an alternative remedy to fumigations with hydrocyanic acid gas, the American method of destroying citrus scales, also entered into the scope of the competition. Exhaustive experiments recently conducted here in fumigation leave no doubt that it is a safe and positive remedy for every form of fruit scale, but the initial expense of purchasing the tents and other fumigation equipment has hitherto proved an obstacle to its immediate adoption in this district, where farms are usually very small and the benefits of cooperation are not yet fully appreciated.

The conditions of the competition required that each competitor should submit the formula and cost of the insecticide to be tested, and that the formulas of successful insecticides should be published for the benefit of the agricultural community. About 70 insecticides were entered for trial, but as one-half of them were of almost identical composition, with only slight variations in the proportions of the ingredients, many were eliminated and 34 insecticides were actually tested.

Award of Prizes—Formulas.

The first prize was not awarded because, in the opinion of the jury, none of the preparations experimented with proved to be a complete and positive remedy against all species of citrus scale. The second and third prizes were awarded to the following formulas (1 gram = 15.4 grains, or 0.035 ounce; 453 grams = 1 pound):

(1) Pine rosin, 1,600 grams; sodium carbonate, 800 grams; potassium chloride, 70 grains; clammy inula (*Inula viscosa*), a few cuttings of the plant, in infusion; 26 gallons of water. (2) Rosin, 2,000 grams; caustic soda of 78 strength, 500 grams; seal oil, 350 grams; rectified tar oil, 1 quart.

In preparing these insecticides for use, the soda is dissolved in hot water (1 gallon) and the rosin added so as to effect a complete blending of both. The mixture is then left to cool and the oil afterwards stirred into it producing a uniform emulsion sufficient for about 25 gallons of water.

Resistance of Scale.

The jury finds that these insecticides destroyed, without appreciable damage to the trees or fruit, both the red scale (*Chrysomphalus dictyospermi*) and long scale (*Mytilaspis gloveri*) more rapidly than the insect multiplied and that consequently it is only a question of perseverance in spraying to compass the complete extinction of these parasites. With regard, however, to the black scale (*Parlatoria ziziphi*), a species apparently unknown to American fruit growers, the most successful of the insecticide formulas experimented with failed to make an effective impression on the hard cuirass or shield covering the fully matured insect, which appears to be impervious to every treatment except hydrocyanic fumigation applied as strong as the tree will resist.

The competition brought into the experiment field a great variety of sprayers from the leading agricultural countries, including several characteristic American types with copies and imitations of them manufactured in Spain. The way in which these American sprayers are reproduced in almost every detail, both the large barrel and pump models and the handy wheelbarrow combinations for transporting sprayers through growing crops, seems to indicate that American manufacturers' rights are not protected by patents in this country.

Spanish Preferences.

The use of sprayers in this region is confined chiefly to orange trees and vines, and the conditions required in a successful sprayer are (1) extreme portability, (2) the blades of the agitator or mixer should work simultaneously with the ejecting mechanism so as to insure perfect uniformity of the strength and consistency of the insecticide, and (3) isolation, as far as practicable, of the acid mixtures that enter into the composition of most insecticides from the joints, lining, and valves of the sprayer. The larger farms and higher cost of labor in the United States create a demand for sprayers of 50 to 200 gallon capacity operated by horse or power traction, but there is no market here for such big sprayers. On the contrary, the very small farms, high rents, and cheap labor that characterize Valencian agriculture tend toward the suppression of roads, paths, and marginal divisions between crops and spaces at the ends of fields for turning or operating the simplest machinery.

In order to utilize every available inch of soil, even the irrigation distributing canals have their containing banks so pared away that they barely prevent leakage, and it is quite usual to see from 7 to 10 crops cultivated simultaneously on $1\frac{1}{2}$ acres. Under such conditions it is not surprising that the favorite types of sprayers in demand here, and those to which the jury accorded the preference in the recent insecticide competition, are small 4-gallon sprayers of the Italian "Muratore" and French "Excelsior" pattern, which are carried on the back of the operator like a knapsack and secured in place by shoulder straps. The mixing and expelling power is usually compressed air or a small force pump. The Italian model modified and manufactured in Spain claims complete isolation of the corrosive-acid mixtures from all the interior live parts of its mechanism.

Cuttings from local catalogues forwarded [and obtainable from the Bureau of Manufactures] will give manufacturers a fairly accurate idea of the class of sprayers required on these markets.

SWEDEN.

[From Consul Stuart J. Fuller, Gottenborg.]

Sprayers are sold and used in Sweden to some extent, but not so generally or so widely as in the United States. More are used in the two southernmost counties, Malmohus and Kristianstad, the part of Sweden called Skane, than anywhere else. About one-half the cultivated area of the Kingdom is devoted to cereal crops, one-third to fodder plants, and one-tenth is allowed to lie fallow. The season for fruits and vegetables is short. It varies, the period of cultivation growing more restricted as one goes northward, until, in northern Sweden, laborers can be employed in farming for only about four months of the year.

Limited Culture of Fruit.

The cultivation of fruit trees can be carried on successfully only in the southern and central parts of the country. The fruits most generally cultivated are apples, pears, cherries, and plums. Apricots, peaches, and grapes can be grown only under glass. For small fruits, such as strawberries, raspberries, and currants, the climate in this consular district is especially favorable.

The use of sprayers in the country is restricted to fruit trees and berry bushes, except for a limited use in Malmohus and Kristianstad Counties of horse-drawn sprayers for weed killing. For root crops they are not used at all. The type most generally in use is the hand machine to be carried. There are very few hand machines with wheels and still fewer horse-drawn apparatus.

The hand machines are used for fruit trees and berry bushes. The principal use in connection with bushes is to combat the so-called "American gooseberry mildew." Single-horse machines are used to a limited extent in Malmohus and Kristianstad Counties in the spring grain to destroy the weed called navew (*Brassica campestris*).

Various Types of Machines.

The majority of the sprayers in use now are imported, though Swedish manufacturers have begun to turn them out in the last few years. The imports in 1910 were valued at \$2,502, of which Germany furnished \$1,855 worth, Denmark \$533, and the United States

\$91. Sixty per cent of the imports were at Malmo, 10 per cent at Helsingborg, and 10 per cent at Gothenburg, all in this consular district. Most of the imports from Denmark are believed to represent German machines transshipped at Copenhagen or shipped by ferry from stocks in the free port there to Malmo.

The great bulk of the imported sprayers in use are German, made by Carl Platz Maschinenfabrik, of Ludwigshafen, or by Gebrüder Holder, of Metzingen. The names of the best known German sprayers are Automax and Perfekt. Several American sprayers are sold and in use.

The Bill sprayer, made by Billmans Fabriks och Handels Aktiebolag, at Stockholm, is one of the best known Swedish machines. It is an automatic air-pressure device. Ystads Gjuteri och Mekaniska Verkstads Aktiebolag, of Ystad, has lately put a sprayer on the market. Another Swedish sprayer called Dugg is also offered. The automatic, such as Automax, Perfekt, and Bill seem to be more popular than the pump sprayers. The horse-drawn sprayers are apparently all German. A. Paulson, of Eslof, makes a specialty of these.

[A list of Swedish firms handling spraying apparatus may be had from the Bureau of Manufactures at Washington.]

MEXICO.

[From Consul William. W. Canada, Vera Cruz.]

The territory covered by this consular jurisdiction offers a field for introducing sprayers for destroying insects injurious to growers of fruit, both in the hot lands and in the more temperate localities in this district. The native has never troubled himself in trying to rid his plants or trees of these pests, of which there is an infinite variety in tropical climates. It will be remembered that some years ago nearly the entire north coast of Cuba was depleted of coconut trees, the insects attacking the leaves, adhering to the underside, and continuing their ravages until the tree was killed and nothing was left of it but a bare pole, blackened at the top. This was disastrous to the planters; and it seems now that, if means had been at hand to spray these trees, they might have been saved at a comparatively small expense and these heavy losses prevented.

Foreigners Will Develop Fruit Growing.

For a number of years past Americans as well as Europeans have engaged in fruit raising in this district, which enterprise, however, is yet in an experimental stage. In the course of time matters will take a more definite shape, and fruit farms will be operated on a business basis, particularly so in localities where new routes of communication have been laid out and facilities for cheap transportation are available to reach the centers of population and the ports of shipment. While the fruit culture is in its present undeveloped state, little can be done in introducing hand or mechanical sprayers. Americans, Frenchmen, Italians, Spaniards, and Germans are the people that will develop this business, and they know all about spraying and the utility of it; in fact, there are those who use some homemade contrivance like a hand sprinkler or garden syringe to which a spraying nozzle has been attached. Small hand-spraying pumps may be found at all hardware stores, made out of brass tubing. As these imple-

ments are also used for many other purposes, it would prove to be a difficult matter to determine the quantity sold simply for spraying fruit trees.

During the present conditions in Mexico, which have made themselves felt in this consular district to a great extent, very little can be done in the line of introducing sprayers or any other innovation of comparatively unknown implements. Later the entire district should be canvassed with a view of determining the needs of the planters. Aside from fruits there are also coffee trees that suffer from a microbe that attacks the leaves, and tobacco plants need careful watching, for they have their enemies as well.

It has been found that while catalogues and circulars may have their uses, as sellers they amount to very little until a business connection has been made. A personal canvass of the entire district by a competent person will surely result in a good business when the proper time arrives.

GREECE.

[From Consul A. B. Cooke, Patras.]

Sprayers for Currant Vineyards.

The large number of sprayers used here are almost entirely for spraying grape and currant vines. Those mostly in use are either imported from France and Italy, or imitations of the foreign make manufactured locally by hand. [The names of local makers of sprayers may be had from the Bureau of Manufactures, Washington, D. C.] Some American sprayers have been introduced and are reported to render good service.

The sprayer used is a metal affair holding about 3 gallons of water, carried on the back of the operator. The operator works a lever as he walks about the vines driving the spray by air pressure through a small hose and nozzle upon the vines. The spray is a 2 per cent solution of sulphate copper.

For other crops, including citrus fruits and olives, no spraying seems to be done here. There appears to be no law in Greece by which foreign patents can be protected against imitation.

TRINIDAD ISLAND NOTES.

[From Consul Franklin D. Hale, Port of Spain.]

Wireless.—Trinidad, which was the first West India island to test wireless telegraphy, is now to have a larger plant at Port of Spain, which will have a maximum radius of 2,000 miles.

Cacao.—Trinidad exports to the United States for the first three months of 1912 aggregated \$1,871,806, an increase of \$293,369 over the same period of 1911. Of the total, \$1,681,270 represented cacao. This season's cacao production, however, is materially affected by the long drought, and the June pickings will be almost nothing.

Coconuts.—Citizens from Port of Spain are scientifically planting a large coconut estate in Tobago. After the growth on the land is cut and burned stump pullers are used. The first machine bought in the United States worked so satisfactorily that more have been ordered. The natives are surprised at the results of the operations. If improved methods could be applied to all coconut estates in Trinidad, increased production would be marked.

ARGENTINE ALLIANCE FOR ECONOMIC PROGRESS.

(From Consul General R. M. Bartleman, Buenos Aires.)

An institution known as the Museo Social Argentino has been organized in this city, with offices at Avenida de Mayo No. 695. Its object is to promote the social progress of this country in all the phases of its development. These objects will be realized by—

(a) Establishing a library and bureau of archives and a collection of objects with a view to the exchange of national and international information regarding the same; (b) publications regarding the activity of the institute and results of its investigations; (c) the initiation of social improvement work; (d) studying and investigating allied conditions existing in Argentina and elsewhere; (e) the organization of lecture courses and a gratuitous consultation bureau; (f) creation of college and university chairs on subjects covered by the objects of the society.

The consultation commission will be divided into four sections at first (1) for the study of city problems, (2) for the study of rural problems, (3) for legislation, and (4) for propaganda. Later other sections will be formed to meet other conditions as they may arise. For the dissemination of the information acquired through its activities and studies the institute will publish a monthly bulletin for circulation at home and abroad.

The Museo Social Argentino will be in effect a federation of the various Argentine economic organizations. The following is a list of the societies here which have already agreed to cooperate with it:

Facultad de Agronomía y Veterinaria, La Plata.
Facultad de Agronomía y Veterinaria, Buenos Aires.
Facultad de Derecho y Ciencias Sociales, Córdoba.
Facultad de Ciencias Físicas, Matemáticas y Astronómicas, La Plata.
Facultad de Derecho y Ciencias Sociales, Buenos Aires.
Facultad de Ciencias Exactas, Físicas y Naturales, Buenos Aires.
Federación Universitaria de Buenos Aires.
Asociación "El Magisterio."
Centro Estudiantes de Arquitectura.
Instituto Nacional del Profesorado Secundario.
Círculo Médico Argentino y Centro Estudiantes de Medicina.
Biblioteca de la Facultad de Ciencias Médicas de Buenos Aires.
Sociedad Científica Argentina.
Sociedad Central de Arquitectos.
Central Nacional de Ingenieros.
Centro de Estudios "Rivadavia."
Sociedad de Higiene Pública é Ingeniería Sanitaria.

Círculo de la Prensa.
Asociación Universitarias Argentinas.
Centro Estudiantes de Ingeniería.
Dirección General de Salubridad de la Provincia de Buenos Aires.
Asociación Belga de Fotografía.
Liga popular contra la Tuberculosis.
Sociedad Protectora de la Infancia.
La Sanitaria Argentina.
Sociedad Rural Argentina.
Sociedad Anónima "La Martona."
Municipalidad de Luján.
Cruz Roja Argentina (Argentine Red Cross).
Club de Gimnasia y Esgrima.
Cooperativa Nacional de Consumos.
Sociedad Rural de la Pampa.
La Semana Comercial.
Aero Club Argentine.
Unión Industrial Argentina.
Club del Progreso.
Sociedad Sportiva Argentina.
La Noticia.

Among the active members of this society are four cabinet ministers, the mayor of Buenos Aires, university professors, national and provincial legislators, and a number of distinguished people who have achieved success in business and intellectual pursuits.

Intercourse Sought with Associations in the United States.

The Museo Social Argentino has expressed a desire to this consulate general to be placed in touch with the most important societies and organizations analogous and similar to their own existing in the United States; this with a view to exchanging information, correspondence and publications, etc. I, therefore, urge that boards of trade, chambers of commerce, educational institutions, cooperative, legal, architectural, philanthropic, charitable, scientific, art, musical, commercial, financial, physical culture, press, natural history, patriotic, civic, sociological, educational, agricultural, penological, engineering, medical, and similar societies and institutions in the United States take cognizance of this fact and avail themselves of the oppor-

tunity presented. This will no doubt augment the promotion of trade and the better mutual understanding between this country and our own.

However, in writing and sending publications to this country, I would again caution the interested parties to affix the proper postage and thus avoid the creation of a prejudice against American institutions. The short-postage question is a common fault among our countrymen and is not confined to any one class of individuals; even publishing houses and educational institutions have proved delinquent in this respect in mail addressed to the Buenos Aires consulate.

ENGLISH WORSTED SPINNING AT DONCASTER.

[From Consul Augustus E. Ingram, Bradford.]

A recent occurrence of interest to this district is the moving of the Anderton firm of worsted spinners from Cleckheaton to Doncaster. As stated in a recent consular report, the development of the new coal area in Doncaster has brought a large number of people into that district, and a local newspaper, commenting on this new enterprise, says:

As manufacturers always tend to locate in proximity to the coal beds, factories will spring up in the district in all directions. Land is still fairly cheap, although rising in value owing to the coal boom, and local prices are low. There is no part of Yorkshire which now offers so many advantages to the capitalist for sites for establishing industries.

A few years ago a cigar factory left Bradford for Doncaster, but this moving of a textile establishment has aroused especial interest, and the question is asked, Is Doncaster destined to become a center of the textile trade?

The primary reason for moving this spinning mill is the shortage of labor—particularly girl labor—in the old centers of the trade. It has been claimed, and indeed is a theory tenaciously held in textile districts, that the degree of skill which modern conditions demand can only be obtained in the process of years—that the operative with the required subtlety of touch is the product of two or three generations; but the owners of this firm claim that “well-educated girls and boys can be taught to spin quite easily if those who undertake to teach them have the requisite knowledge.” Another fact which has to some extent influenced the firm is that in Doncaster the canal facilities will place them within easier access of the seaport.

The new mill is a two-story building, well lighted and ventilated and fireproof throughout, the principal material being molded bricks, with concrete floors covered with rock asphalt. The latest ideas have been adopted in regard to transmission of power. The shafting is designed to run at high speed and is connected to the frames by half-twist belt drives. The engine is of the inverted vertical compound type, using superheated steam, and is capable of developing 550 horsepower.

Defective cotton baling.—Consul Felix S. S. Johnson, of Kingston, reports that his attention has been directed to the bad condition in which bales of American raw cotton arrive at that Canadian port, the canvas on the bales shown him being of poor quality, easily torn, and most of the iron hoops being broken.

AMERICAN PURCHASES FROM BELGIUM.

[By Consul General Ethelbert Watts, Brussels.]

American purchases from Belgium last year decreased in value over \$200,000 compared with 1910. The merchandise invoiced through the American consulates at Antwerp, Brussels, Ghent, and Liege was valued at \$37,894,351, against \$38,106,590 for 1910. The principal articles contributing to the loss were preserved vegetables, woolen textiles, antimony, arsenic, chemicals, chicory roots, copper, cut diamonds, plate and window glass, horns, iron and steel, ivory, linen goods, and meat extract.

The principal item in the exports to the United States is cut diamonds, which amounted to \$10,009,324, a decrease of \$52,520 compared with 1910. There was an increase of \$552,956 in the value of rough diamonds exported. Another item of considerable importance was rubber, shipments of which amounted to \$6,322,633, a gain of \$1,467,952 over 1910.

Exports to United States.

The following table gives the value of the articles invoiced through the American consulates in Belgium to the United States for 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Aluminum.....	\$19,008	\$23,540	Ivory.....	\$595,652	\$450,716
Aniline colors.....	94,735	139,652	Lace goods.....	343,570	439,046
Antimony products.....	113,769	58,902	Leather, rough tanned.....	40,885	48,537
Arsenic.....	52,073	18,452	Linen goods.....	1,892,429	1,805,683
Automobiles, parts of.....	12,074	24,727	Linseed.....	593,763	693,672
Basic slag.....	12,812	19,632	Lithophone.....	6,505	25,401
Baskets and basketware.....	116,671	104,552	Matches.....	60,244	15,830
Bone meal, waste, etc.....	59,753	30,897	Meat extract.....	273,431	188,464
Books.....	62,364	85,710	Naphthaline.....	37,824	33,717
Canvas.....	19,597	16,336	Nickel.....	12,262	187,507
Capsules, metal.....	11,164	13,901	Oils:		
Chemicals.....	324,396	249,689	Cocoa.....	5,057	36,531
Chicory roots.....	137,169	43,902	Linseed.....	70,256	35,747
Cigarettes.....	23,739	62,131	Mineral.....	31,894	36,335
Coco mats.....	48,499	41,801	Sod.....	15,394	15,069
Colors.....		30,896	Vegetable.....	420,681	683,121
Copper.....	779,096	240,842	Paper and paper parch-		
Cotton products.....	112,264	80,874	ment.....	198,879	292,487
Diamonds:			Paper, photo.....	53,878	27,520
Cut.....	10,061,844	10,009,324	Paraffin.....	74,311	69,763
Rough.....	795,195	1,348,151	Peel, candied.....	20,792	42,764
Fertilizers.....	630,710	643,203	Plants, live.....	362,682	387,883
Fiber, vegetable.....	61,962	33,525	Rags and other paper		
Firearms and parts.....	56,832	74,341	stock.....	633,536	644,785
Fire bricks.....	12,773	11,765	Ropes, old.....	25,093	38,319
Flax.....	999,026	1,024,722	Rubber.....	4,854,681	6,322,633
Fuses, safety.....	28,903	45,813	Rubber, old.....	45,793	54,848
Glass:			Sardines, in oil.....	21,194	20,815
Photo.....	4,016	14,085	Seed.....		199,551
Plate.....	1,166,025	568,199	Silk, artificial.....	151,156	241,937
Window.....	659,915	394,681	Skivers.....	11,982	22,027
Other.....	35,908	40,487	Spools.....		21,455
Glassware.....	144,723	199,554	Sprats, canned.....	36,490	43,262
Gloves.....	130,536	126,802	Steel.....	655,437	202,357
Glue and glue stock.....	194,700	181,285	Stone, flint.....	36,034	35,366
Glycerin.....	344,780	377,657	Straw goods.....	17,479	20,779
Grapes.....	55,757	48,427	Superphosphates.....	57,896	32,547
Gum copal.....	21,125	34,609	Vegetables:		
Gun barrels.....	106,509	90,027	Fresh.....	62,097	93,971
Hair, animal.....	57,093	21,728	Preserved.....	178,125	125,574
Hats, felt.....	61,081	80,442	Wool.....	24,534	12,857
Hatter's fur.....	206,153	228,568	Wool grease.....	61,484	43,525
Hides and skins:			Woolen textiles.....	535,186	475,825
Dry.....	132,365	216,504	Zinc oxide, dust and		
Salted.....	1,946,736	2,001,380	sheets.....	36,929	450,808
Rabbit, etc.....	2,649,439	2,736,399	All other articles.....	1,789,833	731,574
Horns.....	169,527	59,478			
Horses.....	637,373	517,695	Total.....	38,106,590	37,894,351
Iron.....	230,163	120,040			

Shipments to Philippine Islands and Porto Rico.

There was also a decrease of over \$45,425 in the value of the shipments to the Philippines, but an increase of nearly \$24,000 in those to Porto Rico. The principal exports to the American insular possessions were iron and steel, fertilizers, cotton goods, glassware, hardware, woolen goods, and matches. The following table shows the exports and their values for 1910 and 1911 to the Philippines and Porto Rico; there were no articles invoiced to Hawaii:

Articles.	1910	1911	Articles.	1910	1911
TO PHILIPPINE ISLANDS.			TO PHILIPPINE ISLANDS—cont.		
Canned goods, etc.....	\$17,904	\$14,922	Yarn, cotton.....	\$8,071	\$5,378
Colors.....	5,754	5,611	All other articles.....	78,545	104,637
Cotton goods.....	38,899	24,594			
Earthenware and tiles.....	13,490	14,195	Total.....	428,716	383,291
Fertilizers.....		21,005	TO PORTO RICO.		
Glassware and window glass.....	33,656	35,442	Chemicals.....	4,723	9,914
Haberdashery.....	8,845	17,453	Earthenware, tiles, etc.....	1,650	5,960
Hardware.....	44,782	26,429	Fertilizers.....	36,732	21,794
Iron and steel.....	124,310	58,099	Iron and steel.....	13,504	15,530
Paper.....	12,380	9,122	Matches.....	18,613	19,167
Perfumery, soap, etc.....	8,868	8,182	All other articles.....	15,119	41,072
Printed matter.....	12,254				
Railway material.....	9,456	11,569	Total.....	90,341	114,037
Woolen goods.....	13,502	16,605			

WEST AFRICAN NOTES.

[From Consul W. J. Yerby, Freetown, Sierra Leone.]

Radiotelegraphic School at Dakar.

M. Clozel, the acting governor general of French West Africa, has just established at the radiotelegraphic station at Dakar a school of instruction, in order that military telegraphists sent for service to French West Africa may complete their knowledge.

Ivory Coast Rubber Prospects.

Quoting from an official report recently issued on rubber cultivation in the Ivory Coast, French West Africa, the *Quinzaine Coloniale* (Paris) of February 25 states:

The production of wild rubber in that colony is, generally speaking, carried on satisfactorily, except for a certain amount of adulteration. Large tracts of *Funtumia* rubber trees, which have as yet scarcely been touched, still exist in the western half of the colony. In the east the forests have been more depleted, but the deficiency thereby caused can be made up by replanting trees. Great progress is being made with rubber plantations, for which a large part of the Ivory Coast is suitable. The *Hevea* and *Funtumia* are easy to grow and give good results. The great difficulty which is usually encountered in procuring labor in this part of Africa is also disappearing with the opening up of new routes to the Sudan.

AMERICAN LOCOMOTIVES IN FORMOSA.

[From Consul Samuel C. Reat, Tamsui.]

The Railway Department of the Formosan Government on March 30 ordered three passenger locomotives (the Pacific type) from the American Locomotive Works, Schenectady, N. Y. The contract involves approximately \$62,500, including duty. The Japanese house of Mitsui Bussan Kaisha signed the contract for the American firm, which also had a representative here during the negotiation. [The purchase of Ohio locomotives for another Formosan railroad was noted in *Daily Consular and Trade Reports* for May 17.]

PUBLIC HYGIENE IN GERMANY.

[From Consul General A. M. Thackara, Berlin.]

The water supply of the city of Berlin comes in most part from wells situated in the immediate vicinity of the Tegelsee, a lake near the junction of the Rivers Spree and Havel at Spandau, and from the Muggelsee, a lake on the southeastern outskirts of the city, through which the River Spree flows.

The water is drawn from wells formed by sinking steel or wrought-iron pipes through the sand strata down to a stratum of clay of about 60 meters (197 feet) thickness, which forms the water sole of the valley. The wells vary in depth from 40 to 70 meters (131 to 230 feet). The diameter of the pipes at the Tegel works is 152 millimeters (6 inches), and at the Muggel works 230 millimeters (9 inches). At the latter plant, however, the 230 millimeters wrought-iron "mantle" pipe incloses a pipe 150 millimeters in diameter, also of wrought iron. To the lower end of the inner pipe is joined a galvanized perforated filter pipe of the same diameter and about 13 meters (42.7 feet) long. A copper-wire screen covers this filter pipe. By forced pumping the fine sand and slime are removed from the immediate vicinity of the screen, so that the remaining coarse gravel and sand form a natural filter.

The area over which the wells at Muggelsee are dug measures 25 meters (82 feet) wide and 9 kilometers (5.6 miles) long. The wells are in three galleries, 2,740, 4,600, and 2,200 meters (8,989, 15,092, and 7,218 feet) long, respectively. Eight to eleven wells are joined in one group and connected by a siphon to a central well, whence the water is pumped directly to the iron-removing plants (Enteisungsanlagen).

Sewage Disposal—Dairies.

In the two sections of the works at Tegelsee there are in all 118 wells, having a maximum capacity of about 90,000 cubic meters (23,775,300 gallons) daily output, while in the three well sections or galleries at Muggelsee there are 350 wells with a maximum daily capacity of about 190,000 cubic meters (50,192,300 gallons).

The sewage disposal of Berlin is admirable. None of the sewage is permitted to be discharged into the river or canals which pass through the city. It is all pumped through large pipes to the city sewage farms (Rieselfelder) located within a few miles to the north and south of Berlin. The sewage farms have an area of approximately 40,000 acres. About 6,200 acres are leased in small holdings to farmers, the remainder being cultivated by the municipal authorities. While the city administration supervises the cleaning of the streets, the disposal of the sweepings is let by contract. Some of the contractors have purchased barren and unproductive land for dumping purposes, the refuse being exceedingly valuable as a fertilizer.

There are no municipal dairy or milk stations in Berlin. There are several hundred milk dealers, one of whom has a dairy which covers nearly 28,300 square meters (304,621 square feet), almost half of which area is taken up by buildings. About 2,500 hands are employed, and several hundred wagons distribute the daily output of 120,000 liters (31,700 gallons) of milk. Of this amount only a few hundred liters are sterilized; most of the balance is pasteurized by a special process. It is said that 75,000 families are supplied by this

dairy, and that the number of bacteriological and other analyses made by this firm in the course of a year is 50,000. The state of health of the cows is controlled by four certified veterinary surgeons, and telegraphic information is sent to the Berlin headquarters upon the outbreak of any disease.

Food Analysis.

Special stress is laid on the prevention of tuberculosis. The cattle, most of which are of Simmenthal and Jeverland breeds, undergo a thorough clinical examination including the tuberculosis test, and repeated inoculations with tuberculin at intervals of five months and weekly veterinary inspections are made. All calves raised for breeding purposes are rendered immune by the Behring process.

Bottles are filled by siphoning, and tin receptacles, bottles, etc., are sterilized. The whole farm is fenced in and the stables are small and independent of one another. The laws of Berlin do not require the pasteurization of milk at present, but a new enactment on the subject is now being drafted. Milk sold in Berlin is required to have 2.8 to 3 per cent butter fat; cream must contain 10 times this amount, that is, 20 to 30 per cent. The number of bacteria in milk is not counted; it is estimated at the agricultural experimental stations in the various provinces.

The laws of Berlin provide for the inspection of dairies, and the provincial towns have similar regulations. In some communities a medical or veterinary inspector is maintained, who examines samples of the milk, and the results of the analyses made by him are published from time to time. In Berlin, the city institute for the examination of foodstuffs (Städtisches Nahrungsmittel Untersuchungsamt) is in charge of the administration of the food laws. It is directly under the control of the police. The institute makes chemical, microscopic, bacteriologic, photochemical, and other analyses of foods, etc. It works in conjunction with the sanitary, medical, and criminal police departments. Persons suffering from the ill effects of foodstuffs are at liberty to apply to the police, who will have an examination of the suspected food made free of charge. The annual expenses of the institute amount to about \$11,900.

Tuberculosis Hospitals.

No municipal tuberculosis hospital is maintained, but there is a sanitarium for tubercular diseases at Beelitz in der Mark near Berlin, and stations are maintained in the city at which phthisis sufferers may obtain advice and assistance. These latter institutions look out primarily for the prevention of tuberculosis. Between 1904 and 1907 about 35,000 persons received attention at these institutions, 18,500 bad dwellings were improved hygienically, and many persons assigned to sanitariums.

The hospital for consumptives at Beelitz is not a Berlin institution. Its current expenses are met out of the national insurance fund, it having been erected in compliance with the imperial invalidity law. The hospital consists of two parts, one for the treatment of consumption and one a sanitarium. In 1906 the expenses were about \$349,900. More than 4,000 patients received treatment in that year, of which about 3,600 were new cases.

Ventilation for the hospital is obtained by means of ventilators fed from underground air ducts constructed of glazed tile. In the con-

sumptives' quarters the fresh air is first warmed in special chambers and moistened with steam. Rabitz collectors dispose of the stale air, which is led to chimneys where hot-air currents create a sufficient draft to exhaust it.

Other Health Measures—Municipal Abattoir.

Cholera, plague, and smallpox are quarantined in Berlin by isolation. Cases of typhoid fever, diphtheria, and scarlet fever are quarantined in the house where they occur. Fumigation is resorted to in each case. Physical examinations of school children are made at regular intervals, usually twice in a school term.

As in most German cities, there is a municipal abattoir in Berlin. There are no regulations applying especially to cold-storage plants. There is, as a matter of fact, only one important storage house of this kind. It is connected with the municipal abattoir. The display of fruit and other eatables on stands in the public streets is permitted.

MARKET FOR METAL BEDSTEADS.

[From Consul José de Olivares, Madras, India.]

There is a growing demand in this consular district for metal bedsteads and woven-wire mattresses. Imported wares of this character are steadily supplanting kindred commodities of domestic manufacture. Imports of metal bedsteads and mattresses into the Madras Presidency from all countries during the year 1910-11 were as follows: United Kingdom, \$3,392; United States, \$1,236; Germany, \$228; France, \$124; Straits Settlements, \$20. While the total of \$5,000 is not large, the line of goods represented offers excellent opportunities for exploitation and development in this country.

The style of metal beds used hereabouts has a somewhat wide range, including all iron, combination iron and brass, and all brass; they are also sold in all sizes, including double, three-quarter, single, as well as various sizes in children's cots. Bedsteads are generally preferred with upright corner posts for mosquito netting, although there is also a market for beds without the mosquito net accessories.

The retail prices of metal bedsteads with wire mattresses most commonly sold in this district range from \$5 for the plain all-iron sort to \$50 for the better combination iron and brass style. There is less demand for all-brass bedsteads, the retail prices of which are relatively high, varying, according to size and elaborateness of design, from \$57 to \$96.

No Opening for Dentists in Borneo.

Consul Orlando H. Baker, of Sandakan, does not recommend Borneo to American dentists as a field of operations. There are only 60 white people at Sandakan, and as the few interior settlements are far apart, a dentist would have to travel far to find patients. Hence there are no permanent dentists there. Occasionally a Japanese or Chinese drops in and practices for a short time among his countrymen.

Martin & Co., Calcutta, British India, have been authorized to make a survey of the proposed Futwah-Islampur railway. This line will be about 26 miles long.

BALING AND MARKETING COTTON.**A Great Economic Loss to the United States.**

Cotton is probably the greatest single contributor to the world's commerce. Cotton grown in the United States constitutes about 70 per cent of the entire consumption of the world. Of the 1911 crop there were ginned in the United States upward of 16,000,000 bales of 500 pounds each. At current prices the value of the year's crop is over a billion dollars. Notwithstanding the enormous value of this American cotton crop, no other commodity known to commerce is so carelessly treated by the producer and those engaged in preparing it for market. The money loss to the producers in consequence of this carelessness has been placed by men competent to make intelligent estimates at \$50,000,000 per annum on a normal crop, and, large as is this sum, it does not include many items of fixed charges that attach to the system in vogue of conveying cotton from the gin to the mill that could be dispensed with, the abolition of which would result in a saving of many millions of dollars annually.

The present methods of baling and preparing cotton for market have been a subject for investigation by the Bureau of Manufactures, and the results of inquiries by commercial agents and consular officers have been published from time to time in Daily Consular and Trade Reports and in monographs that were given wide distribution. These publications concentrated public attention upon the disgraceful and wasteful system in vogue, and were followed on the part of common carriers and commercial bodies directly concerned in marketing cotton by efforts to bring about improved conditions. Unfortunately, in the absence of organization that would include the principal growing States, there was no concentration of effort, and in view of the great volume and value, the large area covered, spreading over boundary lines of 10 or more States, and the number and character of the people employed in the industry, it is very doubtful whether remedial measures can be successfully introduced through the initiative of individuals, associations, or States.

The Present Investigation.

The great importance of this subject, which is a matter of the utmost concern, not alone to the people of the cotton-growing States, but to the entire country, impelled the Bureau of Manufactures to renew former activities in this direction, and Commercial Agent John M. Carson was assigned to visit the principal points for concentration of cotton in the South, and to confer with men engaged in the several branches of the industry, from the farm to the mill, with the object of ascertaining whether any plan or system for the better and more economical preparation of cotton for market could be devised that would meet with the general approval and cooperation of all the parties immediately concerned. In the course of his inquiries, Maj. Carson found a universal desire for the betterment of existing conditions and a readiness to cooperate in any movement to establish a practical system calculated to secure the marketing of cotton in accordance with modern economic commercial methods.

When completed, the results of Maj. Carson's inquiries, together with observations of existing conditions, and the wastefulness, irritations, contentions, and litigations that naturally spring from them, will be published by the Bureau of Manufactures in pamphlet form for general distribution.

ALASKAN HERRING TRADE IN CHINA.

[From Consul General George E. Anderson, Hongkong.]

A determined effort is being made to again build up the trade of American interests in China in salted herring shipped from the Pacific coast of the United States, which assumed large proportions two and three years ago. As indicated in a report of about a year ago, there was a failure to a considerable extent of the herring catch in the Puget Sound country last year and the trade to China languished. Apparently the failure was due only partly to natural causes.

The British Columbia herring catch for the past season, in which American capital is largely interested, is placed at 11,850 tons, and that of Alaska amounts to about a thousand tons additional. Practically the whole of this output is sold on the Japanese and Chinese markets. Shipments from the Canadian and American ports to Hongkong, Shanghai, and Japanese ports already this season have been very large, so it is expected that the trade for the present season will be fully up to the average. American fishing interests are thoroughly canvassing the Chinese market with a view of increasing their sales as their increased output, for which additional facilities are constantly being established, is realized.

The difficulty of building up the export of such goods to China and the Far East generally is largely one of conditions peculiar to the trade. It is difficult to get such goods into this market without selling forward, and it is difficult, if not impossible, to sell forward on a fish catch. Contracts have generally been made for delivery subject to catch, but it is readily understood that if there is a large catch dealers at this end of the line will not be disposed to accept goods ordered at prices representing an average catch, while if there is a failure of the catch shippers in the United States or Canada will not be disposed to fill orders on the basis of average prices to any greater extent than they are compelled to do. As a result of difficulties and losses growing out of such a situation, dealers in Hongkong and in China generally have not been disposed to handle the goods. In general, the possible sale of such fish in China depends altogether upon price. High prices for fish mean practically a suspension of trade. Average prices mean a good trade, while low prices afford a trade practically without limit. Representatives of American fish interests traveling to Chinese ports say that with present average catches there is practically no limit to the possible trade with China—the trade is only limited by the supply of fish.

UNIFORM AGENCY CONTRACT.

[From Consul Herman L. Spahr, Breslau, Germany.]

The Berlin Chamber of Commerce has officially issued a blank agency form, based on recommendations of experts, whereby to avoid obscurities and prevent trade disagreements. Naturally certain provisions therein are not applicable to all branches of commerce, while other provisions may be added in particular cases. The contract considers (a) the agent's authority, (b) the obligations of the parties, (c) commissions, (d) expenses, and (e) duration of the contract. Furthermore, special provisions are made for the settlement of differences by arbitration. [A copy of this form, in German, will be loaned by the Bureau of Manufactures.]

A SOUTH AFRICAN AGRICULTURAL SHOW.

[From Consul E. A. Wakefield, Port Elizabeth, Cape Province.]

Attendance at the Port Elizabeth Agricultural Show during the last week in March was gratifying, the number on March 28 being 25,000.

Exhibits of American machinery should have been more general and of greater variety in order to get proper results. The Port Elizabeth show is the great event of the year in this vicinity from a commercial standpoint, both with the wholesaler and retailer. Hundreds of farmers attend to exhibit stock and produce and also to inspect and purchase machinery and supplies for the coming year. Importers may readily see the absolute necessity of exhibiting such manufactures and products as pertain to the farming community, if they are to be properly introduced.

A clean, bright, up-to-date, commercial town, situated on a beautiful bay, Port Elizabeth has facilities and advantages which commend it to the up-country visitor. The fair adds a liberal prize list, numerous and varied special attractions and exhibits, and exceptional facilities for inspecting manufactures and produce of all description. During the show week business arrangements are perfected which cover fully one-third of the annual turnover for this vicinity.

American manufactures are favorably received and space for exhibiting may be obtained through local agents or representatives. This exhibition is for one week and is held between March 15 and 30 each year. Imported articles exhibited include musical instruments, food products, agricultural machinery, implements and tools, hardware and cutlery, leather manufactures, motor cars and cycles, engines, windmills, pumps, wagons and carriages, paints and oils, boots and shoes, ropes and cordage, belting, and various other lines imported by local business houses.

[A complete list of South African cities where annual agricultural shows are held appeared in Daily Consular and Trade Reports for Mar. 28, 1912.]

EXPOSITION OF WOODWORKING MACHINERY.

[From Consular Assistant Bartley F. Yost, Paris, France.]

In connection with the Exposition of Agricultural Automobiles, which will be held at Bourges, France, from September 26 to October 6, 1912, there will be added a department of woodworking machinery, which is to be international in its character and under the patronage of the French Minister of Agriculture. The woodworking machinery on exhibition will be classified as follows:

1. Mechanical apparatus for felling trees.
2. Power saws for preparing industrial and stove wood in the forests.
3. Wood-splitting machines.
4. Motor-power machinery for sawing and splitting wood for cook and heating stoves.
5. Stationary power saws.
6. Various woodworking machinery operated by motive power.

For full information inquiries should be addressed to "Commissaire Général de l'Exposition d'Outillage Mécanique, Bourges (Cher.), France."

A bridge contract is said to have been awarded to a German firm by the Volga-Bugulma Railway for a \$5,000,000 structure across the Volga, near Simbirsk, Russia.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8873. Sheet copper.**—An American consul in the Levant reports that a business man in his district dealing in tin, zinc, lead, and copper will be pleased to receive quotations from American exporters of sheet copper.
- No. 8874. Soft lumber for furniture making.**—A business man informs an American consulate in a Mediterranean country that he is anxious to get into communication with exporters in the United States of undressed soft lumber for furniture-manufacturing purposes. Correspondence should be in French.
- No. 8875. Organs.**—A report from an American consul in South Africa contains the information that a firm in his district is in the market for cheap American organs to sell to the farmers in the surrounding country. An American merchant doing business in that region states that this firm has excellent connections, covers a big territory, and if an organ can be found to meet the requirements, it will probably handle 100 or more. The firm will pay cash against documents in the United States through its American agents. American firms manufacturing such organs should send catalogues, price lists, and full particulars without delay.
- No. 8876. Silk, cocoons, gum tragacanth, and oriental products.**—An American consular officer in the Levant reports that a well-known firm in his district is desirous of being put in touch with importers of raw silk, cocoons, cocoon waste, skins, gum tragacanth, and various other oriental products.
- No. 8877. Agencies for American goods.**—A business firm in the United Kingdom informs an American consular officer that it is anxious to secure additional American agencies. This firm deals in knitted goods of all kinds, and it already has a number of American connections, but desires more.
- No. 8878. General hardware, metal goods, etc.**—A communication has been received at an American consulate in the United Kingdom from a business man in that country with regard to taking up the sole agency in Great Britain for general hardware, small metal goods, brass foundry, etc. The inquirer is a commercial traveler calling upon large houses throughout the country, and, it is stated, can furnish first-class references.
- No. 8879. Motor boats.**—An American consular officer in Portugal reports that a resident of his district wishes to receive catalogues, price lists, etc., from American manufacturers of motor boats. Correspondence should be in Portuguese.
- No. 8880. Coal.**—From an investigation just made, an American consul in a European country reports that it would appear there would be an opening in his district for American anthracite coal. Exporters of such coal are requested to forward quotations to the consulate in question for quantities of 3,000 to 5,000 tons f. o. b. certain city. Analyses of the varieties offered should also accompany quotations.
- No. 8881. Hotel.**—According to the report of an American consul in Canada a new hotel will be built in his district in the near future, the estimated cost of which will be \$200,000. Plans and specifications can be obtained of a person whose name is given in the report.
- No. 8882. Lumber for building purposes.**—A business firm in the Near East informs one of the commercial agents of the Department of Commerce and Labor that it desires to import American lumber for building purposes. Oak and pine are particularly wanted, but there is a good demand for practically all kinds. A list of the sizes of timbers and boards which are in demand is filed with the Bureau of Manufactures. There is an excellent opportunity for American manufacturers to secure a large share of the lumber trade in the country in question, and the firm referred to has every facility for handling the business. Correspondence in French is desired, but English is understood.
- No. 8883. Canned goods.**—An American consul in Great Britain reports that a well-established commission agent in his district desires to secure agencies for canned meats, beef, mutton, salmon, tongue, beef extract, canned fruits, and baking powder.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

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COMMERCIAL PROGRESS OF IRELAND.

[By Consul Hunter Sharp, Belfast.]

Agricultural and rural life in Ireland has been much improved by the system of land purchase introduced under the act of Parliament in 1885 and by supplemental acts enabling tenants to borrow money on Government credit for the purchase of farms. The installment payments of these loans are spread over 50 or 60 years, on such terms that the annual amount required to cover both interest and sinking fund is less than the rent formerly paid.

Under these acts the Government has already advanced more than \$486,650,000, and in the course of another 30 years a large part of the Irish farmers should own their farms free from any charge. To restrain the exodus from the country districts into the large towns laborers' cottages have been built in the country districts. These, with about half an acre of land each, are let to laborers at 24 to 36 cents a week, the difference between the rent charged and the annual cost being borne by the taxpayers.

A congested-districts board has been formed, among its objects being the removal of families from lands too poor and barren to support the number settled on them to more fertile localities, the securing of suitable land for this purpose, the promotion of cottage industries, and the development of the fisheries along the Irish coast.

The Department of Agriculture in Ireland, which has been established about 10 years, has done much useful work in disseminating informa-



"Made in Ireland" trade-mark. Inscription in Gaelic. See page 772 as to its use.

tion and establishing model schools for the instruction of farmers and for training women in dairy work. The Irish Agricultural Organization Society has for its object the teaching of the farmer that whatever legislation may do for him his own energy and industry remain the chief factors in the achievement of rural happiness and prosperity, and instructing him in the accomplishment of this end through the organization of societies for the purchase of his requirements and the marketing of his produce. No less than 100,000 farmers are now so organized in some 907 societies, including creameries, credit banks, agricultural societies, etc., having a turnover of about \$13,528,870 in 1911. Better farming methods are introduced, and the social relations developed do much to counteract the isolation and monotony of farm life.

Crop Returns—Live Stock.

Three-fourths of the population of Ireland is engaged in agriculture, mainly in the south and west of the country, and a distinct improvement in the rotation of crops is shown from year to year. The exceptional drought which prevailed during the growing season in 1911 no doubt caused many crops to be harvested in much smaller quantities than would otherwise be the case, but with the good prices realized, the results should be satisfactory. The flax crop suffered for lack of moisture, but while the amount of straw pulled was disappointing the prices for the finished article were fairly up to the average.

The abundant yield of potatoes in northern Ireland in 1910 gave the farmers a fine opportunity to dispose of a large surplus to France and southern England at good prices during the following winter and spring. In 1911 they were again favored with a large crop, giving prospects of large exports to England, the Continent, and the United States. The latter country has already taken a large quantity.

The following table shows the acreage devoted to various crops in Ireland in 1910 and 1911:

Crops.	1910	1911	Crops.	1910	1911
	<i>Acres.</i>	<i>Acres.</i>		<i>Acres.</i>	<i>Acres.</i>
Wheat.....	47,631	45,066	Vetches.....	2,303	2,317
Oats.....	1,073,680	1,040,185	Rape.....	2,856	2,941
Barley.....	168,008	158,180	Other green crops.....	30,233	26,127
Rye.....	8,681	9,026	Flax.....	45,974	66,618
Beans.....	1,839	1,683	Fruit.....	12,904	14,045
Peas.....	230	301	Hay:		
Potatoes.....	502,985	591,259	First year's.....	517,182	542,401
Turnips.....	275,286	270,795	Second year's.....	363,659	396,822
Beets.....	75,267	77,857	Permanent meadow..	1,540,746	1,573,180
Carrots.....	1,487	1,444			
Parsnips.....	703	696	Total.....	4,792,721	4,861,214
Cabbage.....	30,857	37,281			

The number of the principal live stock in the island excepting sheep shows an increase in 1911 compared with 1910. The following table shows the number of each for the two years:

Live stock.	1910	1911	Live stock.	1910	1911
Asses.....	240,677	246,353	Mules and jennets.....	31,460	31,740
Cattle.....	4,688,888	4,711,720	Pigs.....	1,200,005	1,415,119
Goats.....	242,614	258,474	Poultry.....	4,339,015	5,447,801
Horses.....	613,244	616,331	Sheep.....	3,979,516	3,907,436

Textile Industry—Small Raw Material Supply.

More than 90 per cent of the spindles and 95 per cent of the looms in Ireland are in factories in the Province of Ulster, where approximately four-fifths of the world's linen is produced. The latest statistics available are those for 1910, which give the number of yarn spindles as 945,962, thread spindles, 19,120, and power looms, 36,892. In 1907, the latest year for which labor statistics can be obtained, 70,382 persons were employed in the flax, hemp, and jute textile factories, 4,103 in the wool and worsted works, 554 in hosiery factories, 403 in cotton mills, and 250 in silk mills.

Although the linen trade had a fair year during 1911, it did not enjoy the same amount of prosperity as some of the other industries. The extra cost of linen and the fall of 6 cents a pound in the price of cotton during the year restricted business and made flax spinning and manufacturing unremunerative. For four months, beginning October 1, 1911, the spinners worked short time. Earlier in the year the Power-Loom Manufacturers' Association took measures to reduce production in their branch of the trade by 10 per cent.

Owing to the almost complete absence of rain in the flax-growing season, weft and fine warp spinners have found it exceedingly difficult to obtain a sufficient quantity of flax of the requisite fineness in any market. Reports from exporters indicate that the spinners will be obliged to take a larger proportion of the more common varieties of flax during 1912.

The imports of flax into the United Kingdom were the smallest since 1904, totaling 62,403 tons (ton=2,240 pounds). The imports of tow were 17,718 tons. The imports of flax from Russia dropped 3,562 tons, from the Netherlands 239 tons, and from Belgium 3,322 tons from the 1910 figures.

The yarn market was dull at the opening of the year, with steady prices and a small amount of business. Tows were scarce and tended toward higher prices in the April quarter. At the end of the first six months the market was very quiet, with prices lower. In the third quarter prices were unsteady and purchases small, and this condition prevailed to the end of the year. Continental yarns were cheaper. The position of the market was generally sound and healthy, as no big stocks of yarns or cloth were believed to exist. With the exception of 1910, the exports of linen yarns from the United Kingdom during 1911, amounting to 18,003,000 pounds, valued at \$5,932,234, were the largest in quantity since 1899. In value they have only been exceeded once, in 1907, since 1877. The imports of linen yarns into the United Kingdom in 1911 totaled 28,976,012 pounds, against 28,801,612 pounds in 1910.

Linen Piece-Goods Market.

The manufacturers of brown power-loom linens experienced a disappointing year. Starting with the average number of orders and prices, the trade gradually slackened and then improved toward autumn. While the decline in yarn prices helped manufacturers who bought short, practically all the advantage had to be given to merchants. The prices in the spring were the most unremunerative since 1908.

There was no great change in the character of the goods made during the year. Colored goods were produced in limited quantities,

as the merchants were very cautious in placing orders. Damask looms were kept fairly busy throughout the year, and this branch of the trade was exempted from the short-time agreements on account of its advance orders. The home trade offset somewhat the sluggishness of the American demand for these goods. There was a steady trade in canvas goods, with prices favoring the buyer. Hucks were in good demand, both at home and abroad, in plain and figured varieties. The makers of shirting linens and cambrics found business unsatisfactory. Brown dress goods were made in fair quantities, but not equal to the 1910 output. Checks, dowlas, ducks, and stripes were placed in moderate quantities during the season. Bleached goods kept well up to the average and did a satisfactory business, although the output was somewhat lessened.

The prospects for 1912 are much better than 1911. The lower prices of yarns offer a safer basis for merchants to operate on, and the outlook in both the home and foreign markets is good.

The exports of linen piece goods from the United Kingdom during 1911 amounted to 194,014,800 yards, valued at \$27,474,755, and the linen manufactures, including sewing thread and other articles, reached a grand total of \$38,177,828, a decrease of \$2,120,168 from the 1910 figures. The best customers for linen piece goods were the United States, which took 107,207,200 yards, valued at \$13,695,698; Australia, 13,321,600 yards, valued at \$2,262,689; and Canada, 12,451,900 yards, valued at \$1,364,182. In each case these returns are below the 1910 figures. The only countries showing increased purchases were the British East and West Indies, Colombia, Panama, and New Zealand.

A textile-testing house was opened at Belfast during 1911, which is proving of increasing value to the trade. All tests are made with the greatest care and absolute secrecy. The testing house is prepared to deal with any samples in connection with the textile trade and its certificates are accepted as evidence in courts of law.

An Irish trade-mark has been adopted and registered in several foreign countries by the Irish Industrial Development Association as a means of promoting the sale of Irish-made goods. It can be used only under a certificate issued by the association, which is granted only to producers of good repute and financial standing, for use on goods of Irish manufacture only. In May, 1911, the right to use this trade-mark had been granted to 495 firms. In addition to protecting its trade-mark, the association endeavors to prevent, by prosecution when necessary, the sale of foreign goods as of Irish manufacture.

[By Consul George E. Chamberlin, Cork.]

Foreign Trade Statistics.

The total import and export trade at Irish ports in 1910, the latest year for which statistics are available, was \$636,970,015, as compared with \$611,601,510 in 1909, an increase of \$25,368,505. The imports were valued at \$316,538,948 and the exports at \$320,431,067. These statistics include the trade with Great Britain and the colonies and foreign countries. The total trade with the United States was valued at \$30,651,469—imports \$12,080,877 and exports \$18,570,592.

The following table gives the quantities and value of the articles imported into Ireland during 1910 (ton=2,240 pounds, hundred-weight=112 pounds):

Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
Ales, spirits, wines, etc.:			Grain, flour, and feed stuffs:		
Ale and beer barrels..	160,437	\$2,381,339	Barley.....cwt..	989,804	\$1,354,483
Brandy, gin, etc., gallons.....	478,470	480,246	Bran and pollard, cwt.....	1,180,759	1,388,656
Whisky, etc. gallons..	261,853	244,245	Corn food.....cwt..	22,403	109,024
Waters, mineral, etc., cwt.....	33,894	131,916	Cottonseed cake, cwt.....	15,518	589,071
Wine.....gallons..	1,503,665	2,256,255	Cottonseed meal, cwt.....	203,156	326,946
Other.....		160,581	Feed stuffs, unclassified.....cwt..	575,908	677,713
Animals:			Hops.....do.....	85,535	2,497,536
Horses.....number..	4,402	888,136	Linseed cake.....do.....	25,346	1,017,609
Sheep.....do.....	38,736	350,663	Linseed meal.....do.....	37,150	162,711
Arms and ammunition,			Maize.....do.....	11,435,688	15,420,182
cwt.....	12,953	352,166	Malt.....do.....	735,196	2,200,865
Asbestos, etc.....cwt..	63,009	128,403	Meal.....do.....	134,866	164,230
Bedsteads.....do.....	49,347	372,229	Oats.....do.....	452,497	605,704
Biscuits.....do.....	73,591	519,290	Oatmeal.....do.....	106,358	468,756
Brushes and brooms, cwt.....	33,224	487,750	Oil cake.....do.....	12,804	414,368
Bristles.....pounds..	265,216	338,800	Peas.....do.....	45,084	103,457
Butter.....cwt.....	77,945	2,325,204	Rice.....do.....	74,328	196,913
Margarin.....do.....	54,376	694,030	Rye.....do.....	363,204	669,835
Candles.....do.....	68,103	447,121	Tapioca and sago, cwt.....	42,773	108,465
Carriages, cars, etc.:			Wheat.....cwt.....	7,997,988	15,745,293
Carriages, wagons, and carts, number.....	1,609	228,705	Wheat flour.....do.....	4,002,990	13,069,932
Cycles.....		729,975	Hair, fiber, etc.:		
Motor cars.....		1,557,280	Cotton waste.....lbs..	1,873,872	157,684
Motor cycles.....		121,663	Hair, curled.....cwt..	5,323	119,701
Railway wheels, wagons, etc.....		129,308	Mats and matting, cwt.....	6,327	158,059
Cement.....tons.....	143,519	1,004,003	Waste, flax, hemp, tow.....cwt.....	64,390	188,012
Cheese.....cwt.....	43,560	588,258	Hides, skins, and leather, and manufactures of:		
Chemicals, drugs, etc., cwt.....	1,038,315	2,050,436	Boots and shoes, cwt.....	165,291	8,819,641
China, earthenware, and raw materials:			Hides and skins, cwt.....	10,279	198,782
China ware.....cwt..	4,525	123,317	Leather.....cwt.....	63,805	2,277,843
Bricks and tiles.....do.....	968,413	383,431	Saddlery.....do.....	3,878	283,084
Earthenware.....do.....	214,430	326,069	India-rubber goods, do.....	15,073	1,677,419
Fire-clay goods.....do.....	125,331	504,178	Instruments:		
Sewer and drain pipe, cwt.....	200,437	105,671	Musical.....		729,913
Chocolate.....pounds..	437,136	163,982	Nautical and scientific.....cwt..	1,023	1,115,168
Coal.....tons.....	4,762,361	13,519,351	Machinery:		
Coke.....do.....	22,636	118,465	Agricultural.....tons..	1,252	255,900
Cocoa.....pounds.....	5,305,304	1,990,082	Textile.....do.....	987	363,300
Coffee.....do.....	1,206,464	141,880	Other.....do.....	24,621	5,949,244
Dyes and tanning materials:			Matches.....cwt.....	40,274	440,983
.....cwt.....	57,655	170,053	Meat, poultry, and game:		
Eggs.....dozen.....	921,010	190,723	Beef.....cwt.....	103,373	842,634
Fats:			Bacon.....do.....	477,382	8,073,050
Grease.....cwt.....	34,960	360,140	Hams.....do.....	25,464	433,723
Lard.....do.....	82,453	1,248,914	Mutton.....do.....	78,397	696,274
Stearin.....do.....	5,372	46,972	Poultry.....do.....	4,820	65,678
Tallow.....do.....	29,791	260,961	Preserved meats, cwt.....	22,207	260,378
Fertilizers.....tons..	196,229	3,368,051	Other meats.....cwt..	198,238	1,046,747
Fish.....cwt.....	353,041	1,506,729	Metals and manufactures of:		
Fishing nets.....do.....	3,803	174,892	Agricultural imple-		
Fruits and vegetables:			ments.....cwt.....	5,995	441,601
Apples and pears, cwt.....	128,491	781,628	Brass and bronze, tons.....	920	298,385
Grapes.....cwt.....	19,148	167,729	Bar and wrought iron.....tons..	61,629	2,354,430
Oranges.....do.....	198,339	676,310	Bolts, rivets, nuts, nails, and screws, tons.....	16,013	598,011
Other fresh fruits, cwt.....	187,102	795,969	Copper.....tons.....	1,763	579,548
Dried.....cwt.....	135,131	1,083,195			
Preserved.....do.....	175,681	1,184,978			
Nuts.....do.....	11,470	82,567			
Vegetables.....do.....	402,241	413,613			
Plants, bulbs, etc., cwt.....	26,443	439,674			
Glass and glassware, cwt.....	398,392	857,311			

Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
Metals and manufactures of—Continued.			Starch.....cwt..	65,676	\$287,649
Cables, electric. tons.	17,371	\$1,268,040	Slates.....tons.	33,510	680,843
Cutlery.....cwt..	4,527	320,727	Sugar, and manufactures of:		
Engines and boilers, cwt.	42,038	419,385	Confectionery.....cwt..	160,511	2,268,543
Forks, rakes, spades, shovels, and scythes, cwt.	17,516	118,209	Glucose.....do....	68,505	183,300
Girders, beams, etc., tons.	3,827	114,071	Sugar.....do....	2,800,988	8,803,357
Hardware.....cwt..	248,089	2,475,014	Sirup and treacle, cwt.	61,959	221,059
Iron manufactures, unclassified...tons.	42,415	3,522,695	Tar and pitch.....cwt..	264,329	321,744
Lead and lead piping, tons.	5,140	400,221	Tea.....pounds..	34,024,592	5,691,834
Lamps.....cwt..	7,920	229,329	Textiles and textile materials:		
Meters.....tons.	156	148,039	Bags and bagging, cwt.	114,804	1,564,431
Ores, various...tons.	64,558	605,301	Cotton—		
Pig iron and scrap, tons.	21,493	333,664	Raw.....cwt..	250,193	4,444,107
Plates and sheets, tons.	43,081	1,855,436	Yarn.....pounds..	12,076,736	2,816,137
Pumps.....cwt..	10,003	137,522	Goods.....cwt..	478,504	22,665,427
Plated ware...do.	3,923	319,778	Canvas goods...do.	10,545	203,561
Rails.....tons.	16,284	487,365	Carpets.....do....	15,179	1,396,116
Steel.....do.	71,513	5,742,300	Drapery.....do....	241,387	20,894,299
Sheet iron, galvanized...tons.	3,893	235,870	Flax.....do....	35,911	357,566
Tin.....do.	2,766	336,518	Hemp.....tons..	14,136	1,681,984
Tin plate.....do.	2,437	160,697	Hosiery.....cwt..	19,610	1,359,909
Tinware.....cwt..	22,714	331,613	Hats.....do....	22,034	2,101,676
Wire, iron.....cwt..	4,976	242,157	Jute—		
Zinc and solder...do.	765	115,565	Raw.....tons..	4,021	308,201
Milk, condensed...cwt..	21,280	233,008	Yarn and goods, cwt.	12,273	110,475
Oils.			Linen goods.....cwt..	113,541	6,034,275
Naphtha.....gallons.	955,368	133,605	Linen yarn...pounds.	17,142,160	3,041,441
Petroleum and paraffin...gallons.	18,614,286	2,453,333	Lace.....cwt..	2,644	213,591
Spirits, methylated, cwt.	15,254	129,911	Oilcloth.....cwt..	47,589	405,287
Turpentine.....cwt..	17,724	172,508	Rope, cordage, and twine.....cwt..	44,596	419,585
Other.....do.	580,446	2,293,659	Silk and velvet...do.	1,239	923,557
Paints and painters' materials.....do.	203,966	666,356	Tow or cordilla...tons.	6,201	707,652
Varnish.....do.	18,311	392,084	Thread.....pounds.	1,476,532	898,375
Paper and printed matter:			Unclassified apparel, cwt.	46,587	3,948,629
Paper.....cwt..	772,859	2,742,482	Wool, and manufactures of—		
Books.....do.	59,599	437,985	Raw.....pounds..	4,794,160	996,421
Stationery.....cwt..	15,571	957,129	Yarn.....do....	2,113,328	1,049,879
Wood pulp.....do.	218,459	568,324	Other.....cwt..	55,345	5,135,350
Other.....do.	41,095	1,096,024	Yarns, unclassified, pounds.	2,143,680	780,396
Paraffin shale...do.	18,614	259,988	Tobacco:		
Pickles, sauces, etc. cwt.	3,848	126,821	Manufactured, pounds.	3,299,448	2,074,000
Pictures, engravings, etc., cwt.	2,960	140,447	Unmanufactured...pounds.	14,183,918	2,157,062
Pipes, tobacco.....cwt..	2,960	648,218	Toys and fancy goods, cwt.	17,594	128,452
Polishes and abrasives.....do.		178,182	Umbrellas.....cwt..	504	132,447
Provisions and groceries, cwt.	60,425	757,198	Wax, paraffin...do.	39,883	181,963
Rosin.....cwt..	50,727	145,031	Wood, and manufactures of:		
Salt.....tons.	36,922	148,238	Corks and corkwood, cu. ft.	66,500	550,158
Seeds:			Furniture.....cwt..	140,373	2,519,426
Clover.....cwt..	13,164	224,219	Lumber.....cu. ft.	19,513,350	7,805,544
Flax.....do.	127,156	580,133	Staves.....tons..	9,707	377,913
Grass.....do.	34,634	294,959	Other.....cwt..	70,499	532,541
Other.....do.	65,625	246,304	Yeast.....do....	23,495	221,066
Soap.....do.	175,458	1,028,184	All other articles.....		5,087,203
Spices.....pounds.	1,142,176	126,228	Total		316,538,948

Farm produce and food and drink stuffs represent 36 per cent of Ireland's import trade and 54 per cent of its exports; manufactured goods 49 per cent of the imports and 40 per cent of the exports; and raw materials 15 per cent of the imports and 6 per cent of the exports.

The Secretary of the Department of Agriculture and Technical Instruction, in a recent report, stated:

It is estimated that not more than one-fifth of the Irish exports go to colonial and foreign countries, the other four-fifths remaining in Great Britain; and while it is much more difficult to ascertain what proportion of imports into Ireland are of colonial

and foreign origin, it seems probable that at least one-third are articles of such origin, the remaining two-thirds being the produce of Great Britain.

The following table gives the quantities and values of the articles exported from Ireland to all countries during 1910:

Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
Ales, spirits, wines, and beverages:			Musical instruments.....		\$104,065
Ale and beer barrels..	1,899	\$28,187	Oils:		
Porter.....hogsheads..	695,923	8,946,559	Petroleum and paraffin.....gallons..	484,942	63,917
Whisky.....gallons..	7,117,654	9,381,142	Other.....cwt..	39,216	190,844
Wine.....do.....	365,966	549,136	Paints, varnishes, etc., cwt.....	110,007	110,245
Waters, aerated, etc., cwt.....	298,587	1,163,620	Paper and printed matter.....cwt..	331,548	1,663,525
Animals:			Pipes, tobacco.....do..		352
Cattle.....number..	881,505	55,922,202	Rags.....tons.....	6,123	143,771
Horses.....do.....	31,894	7,260,891	Seeds, grass.....cwt..	447,490	1,833,572
Sheep and lambs, number.....	731,702	6,142,595	Steam vessels, gross tonnage.....	165,828	17,032,750
Swine.....number..	324,071	6,483,696	Soap.....cwt.....	44,672	261,783
Arms and ammunition, cwt.....	857	193,467	Stone, all kinds.....		1,402,010
Biscuits.....cwt.....	335,970	2,370,750	Sugar:		
Butter.....do.....	698,907	17,445,478	Confectionery.....cwt..	44,288	592,700
Margarin.....do.....	71,144	906,833	Other sorts.....do..	155,779	194,096
Carriages, cars, cycles, etc.....		233,607	Textiles and textile materials:		
Chemicals and drugs.....		890,399	Apparel, unclassified, cwt.....	11,864	1,005,570
Artificial manure.....tons.....	25,658	740,462	Bags and bagging, cwt.....	34,836	474,683
Eggs.....dozen.....	62,278,200	13,354,323	Cotton—		
Fats:			Raw.....cwt.....	251,120	4,399,472
Grease.....cwt.....	61,551	524,190	Yarn.....pounds.....	869,008	202,641
Lard.....do.....	123,524	1,840,958	Goods.....cwt.....	214,360	11,153,646
Tallow.....do.....	11,145	97,705	Canvas.....do.....	13,885	268,032
Feathers.....do.....	15,457	157,967	Carpets.....do.....	6,239	573,843
Fish.....do.....	678,566	3,063,750	Drapery and haberdashery.....cwt..	31,585	2,728,325
Fishing nets.....do..	1,445	114,976	Flax.....tons.....	3,006	760,692
Fruits and vegetables:			Hosiery.....cwt.....	4,668	323,715
Fruits—			Jute yarn.....pounds..	2,483,824	188,809
Green and dried, cwt.....	117,316	474,626	Linen goods.....cwt..	1,221,793	64,933,700
Preserved.....cwt..	62,302	422,383	Linen yarn.....pounds..	24,713,696	7,767,387
Potatoes.....tons.....	119,892	1,956,381	Lace.....		486,650
Plants, trees, etc., cwt.....	10,939	181,885	Rope, cordage, and twine.....cwt..	234,521	2,206,505
Grain, flour, and feed-stuffs:			Roofing, felt.....do..	396,937	579,508
Maize.....cwt.....	665,263	897,057	Silk, poplin, velvet, cwt.....	191	143,143
Oats.....do.....	1,175,241	1,715,792	Thread.....pounds.....	3,855,264	2,345,205
Oatmeal.....do.....	146,526	405,559	Wool.....do.....	14,091,840	3,071,720
Wheat flour.....do..	333,688	947,269	Woolen goods.....cwt..	82,383	3,602,752
Other.....do.....	849,116	1,133,352	Waste, flax, tow, hemp.....cwt.....	187,863	548,542
Hay and straw.....tons.....	9,987	175,656	Yarns, n. e. s.....do..		164,443
Hides, skins, leather, etc.:			Tobacco:		
Boots and shoes.....cwt..	4,061	225,295	Manufactured, pounds.....	7,550,598	2,296,559
Hides.....do.....	218,634	1,960,448	Unmanufactured, pounds.....	1,612,212	245,184
Leather.....do.....	22,579	362,087	Wood, and manufactures of:		
India-rubber goods.....do..	5,420	604,351	Lumber.....cu. ft.....	6,386,450	1,127,612
Machinery, textile.....tons.....	11,868	2,940,554	Furniture.....cwt.....	46,479	843,136
Meat, poultry, and game:			Other.....do.....		235,391
Bacon.....cwt.....	886,986	15,107,811	Yeast.....cwt.....	147,416	1,386,972
Beef.....do.....	1,266	18,507	All other articles.....		3,813,358
Hams.....do.....	117,506	2,859,215			
Pork.....do.....	49,766	729,585	Total.....		320,431,067
Poultry.....do.....	331,081	4,511,416			
Rabbits.....do.....	41,012	251,978			
Other meats.....do.....		1,174,179			
Metal ores.....tons.....	107,690	371,099			
Milk, condensed.....cwt..	292,346	1,867,296			
Cream.....do.....	13,809	183,126			

BELFAST.

[By Consul Hunter Sharp.]

The commercial record of 1911 for Belfast was satisfactory and the activity in local industries was general and well distributed. There was an increase in the coasting and transchannel trade of 1,241 tons, but the labor troubles at the deep-water docks in the summer, which

diverted a certain amount of over-sea traffic from this port, caused a decrease in the foreign trade of 31,762 tons. The linen industry passed through a period of difficulty, rather than of depression, which handicapped all branches of that trade. Flax values continued high throughout the year, checking the demand for finished goods. The lack of sufficient female labor also caused some inconvenience in the textile trade.

Activity in the Shipbuilding and Other Industries.

In shipbuilding and marine engineering unusual prosperity was experienced throughout the year and a vast army of workers received steady and remunerative employment, which meant much to the community as a whole. The percentage of unemployed in Belfast is said to be the lowest in the United Kingdom. During the latter part of the year, the wages of no less than 10,600 employees in the shipyards were increased.

In the two shipyards of Belfast over 22,000 men were employed in 1911, with a weekly pay roll of \$175,194, and a total production of 20 vessels of 184,608 gross tons, against 16 vessels of 165,854 tons in 1910. The most important launch of the year was the *Titanic*, built at Belfast.

The manufacture of rope and twine takes third place among Belfast's industries, the one company engaged in this trade giving employment to some 3,500 persons. The output for 1911 was up to the average of recent years, but raw material was scarce and dear, and the increased cost was not met by an increase in the selling value of the product. There was some labor trouble during the year in this trade, but it was ended in a few days.

Other local industries, including the manufacture of marine engines, textile machinery, heating, ventilating, and drying apparatus, chemicals, roofing felt, paper, packing cases, fancy boxes, wood products, leather and leather goods, and a number of specialties in connection with the shipbuilding works were for the most part prosperous during the past year.

Population and Emigration—Industrial Organizations.

The population of Ireland on April 2, 1911, was 4,381,951 persons, showing a decrease of 76,824 since 1901. An increase of 7 per cent was shown in the Province of Leinster and decreases in the other three Provinces. The number of families in 1911 was 912,711, an increase of 2,455 since 1901, and the average number of persons per family was 4.8, against 4.9 in the earlier year. Belfast increased from 349,180 to 385,492 in the 10 years from 1901 to 1911, Dublin from 290,638 to 309,272, and Cork from 76,122 to 76,632.

The emigrants leaving Irish ports numbered 30,573 in 1911, a decrease of 1,884 from the 1910 figures. Of these, 16,671 were males and 13,902 females. Most of the emigrants went to the United States and Canada, the former taking more than half of the total.

The Belfast Industrial Development Association opened a permanent exhibition in this city on August 7, 1911, at which the variety and value of Ireland's industries are demonstrated. The purpose of the association is the promotion of the sale of Irish products and the safeguarding of the interests of the manufacturers by attempting to prevent fraud or misrepresentation by traders. It also seeks to impress upon the shopkeepers and the public the economic importance

of retaining money and labor in Ireland by encouraging the sale of Irish goods. Goods manufactured in the country are kept prominently before the public by means of the exposition, and the articles exhibited include: Stained glass, tobaccos, cigarettes, paints, varnishes, enamels, inks, jams, sweets, flour, biscuits, cakes, boots, soaps, candles, perfumes, counter cases, metal polish, boot polish, disinfectant powders, electric motors, cider, mineral waters, oatmeal, flaked rice, coco, books, lantern slides, washable paints, roofing felt, enameled jewelry, decorative woodwork, furniture, toys, rugs, bedsteads, embroidery, Irish lace, Irish crochet, every description of Irish embroidered linen goods, damasks, samples of illuminated work—Celtic and otherwise, threads, wicker chairs, baskets, brushes, bedding, boots, woolen materials, serges, threads, matches, waterproof capes, coats, galvanized ware, aluminum cooking utensils, etc.

Harbor Improvements—Real Estate—Railways.

The event of the year in connection with Belfast Harbor was the opening, on April 1, 1911, of the new graving dock, one of the largest in the world and unrivaled in equipment. Its pumping plant and capstan installation are the finest ever established in connection with a work of this kind. The dock is so constructed that it can be enlarged without being put out of commission, and operations have already been considered for making available the extreme width at the entrance of the dock for an entering ship. The length can also be easily increased.

Other important harbor improvements were made during the year, some of the heaviest being for the accommodation of the giant new trans-Atlantic liners. By extensive dredging and cutting away a large part of the southern end of West Twin Island a turning basin was provided for the big ships, which has been successfully used by the *Olympic*. A considerable area of low mire was filled up to quay level with the dredged material, and this reclaimed land near the existing shipyards will eventually be very valuable for industrial purposes. The harbor property has been maintained in a high state of efficiency and every care has been taken to provide facilities for the accommodation and quick discharge of vessels.

Property sold somewhat more freely during 1911 than for several years past, and modern houses are at a premium.

The Great Northern, Midland, and Belfast & County Down Railways, having a total length of 885 miles, showed total receipts of \$7,964,044 and expenses of \$4,884,019 in 1911, against \$7,797,904 and \$4,634,600 in 1910. The decrease in net receipts from \$3,163,304 to \$3,080,025 was shared by all three roads.

Imports of Foodstuffs and Timber.

Owing to the decreased exports of corn from Europe, the price of corn increased during 1911, reaching a maximum of \$7.30 per 480 pounds at Belfast, and fluctuating over a range of \$2.18. Belfast has been for the past 10 years one of the principal importers in the United Kingdom of corn from the United States, largely owing to the existence of two direct lines of steamers connecting with New Orleans, Galveston, and Baltimore. This district has long been noted for superior corn milling, and the millers complain that for the past few years a great deal of soft-grained corn, containing a high percentage

of moisture, has found its way into corn shipments from the United States. They advocate a radical change in the system of grading corn in the United States to avoid this trouble. Largely on account of the labor troubles at the docks during July and August, the transshipment of corn to outports from Belfast decreased from 61,613 tons (ton=2,240 pounds) in 1910 to 37,130 tons in 1911.

Although the flour mills of Belfast did not work under the extreme pressure experienced during 1910, there were few milling centers where the production amounted to a larger percentage of the maximum capacity. One of the large mills was burned in September. The bakery trade would have had a normal year had it not been for the strike that took place in October, although profits would hardly have been as high as those of 1910, owing to the high price of flour and the comparatively low price of bread. Owing to the scarcity of feed stuffs, local mill by-products commanded exceptionally high prices during the latter half of 1911.

The international movement of wheat was much less in 1911 than in the preceding year, as the production throughout Europe was more evenly distributed and the fluctuations in price were much less than usual, being about 97 cents per 480 pounds. The trade at Belfast was interfered with by labor troubles and the imports of wheat fell off 17,784 tons from the 1910 figures.

The heavy stocks of spruce carried over from 1910 reduced the imports of this class of timber, but other timber imports showed a marked increase. Prices were high and the margin of profit small. The slackness of the building trades was responsible for a decline of 1,396 tons in the imports of slates.

The price of sugar was nearly doubled by the drought on the Continent, which practically ruined the beet crop, and the large amount of cane sugar imported was not sufficient to make up the shortage.

Woolen and Coal Trades—Market for American Goods.

It is estimated that over three-fourths of the Irish wool clip is exported, and in spite of the increased output of the Irish woolen mills the imports of woolen goods still exceed the exports. The Irish mills had a prosperous year and their products were in good demand. Irish dealers are giving a marked preference to all home-manufactured goods, which is likely to increase as long as only pure wool is used and the quality and patterns are kept up.

The coal trade, which contributes about one-fifth of the total revenue of this port, was subject to great activity and unrest. The putting into operation of the mines act did not give entire satisfaction, and this was attended by other difficulties. Prices in the summer were lower than in 1910, but rose toward the end of the year with the apprehensions of a strike of the colliers.

American-made footwear is not so much in demand as formerly, as British goods can now be obtained in the same styles and prices and are said to be better adapted to this damp climate. Irish-made boots are much sought after, and the manufacturers can barely supply the demand.

The principal American goods coming into Belfast are agricultural machinery, brushes and brooms, drugs, farm implements, fruits (chiefly fresh apples and pears), canned pears, peaches, apricots, and pineapple, office desks and sectional bookcases, glucose, barley, cottonseed cake, cottonseed meal, flour, Indian corn, corn meal,

wheat, hardware, lard, shooks and staves, bacon and tinned meats of all kinds, typewriters, adding machines, cash registers, automobiles and motor cycles, organs, phonographs, piano players, petroleum, boots, shoes, rubber footwear, roofing slates, canned soups, canned corn, surgical implements, tobacco, barbed wire, and nails. There is a market here for asbestos, cement, cheese, confectionery, window glass, bottles, mirrors, paper, soaps, and sawmill machinery.

Trade Conditions—General Imports.

Imports into Belfast, except shipments in bulk, are generally made through agencies in the larger cities of England. The usual terms on which Belfast merchants buy in the English market are open credit with 5 per cent discount for cash in 30 days. In the case of provisions, such as canned fruits and meats, lard, and bacon, shorter credit and a discount of 2½ per cent are ordinarily allowed, though some of the sales are made for net cash. In the grain and flour trade, drafts drawn at 60 to 90 days are attached to the bills of lading, and no discount is made except a rebate of interest whenever a draft is taken up before its expiration.

The following table shows the principal imports into Belfast, in tons of 2,240 pounds, for 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Beverages:	<i>Tons.</i>	<i>Tons.</i>	Meats:	<i>Tons.</i>	<i>Tons.</i>
Ale and beer.....	7,843	9,783	Bacon.....	2,390	3,231
Porter.....	10,665	12,253	Beef.....	2,171	2,962
Whisky.....	2,197	2,341	Fish, fresh.....	3,159	3,253
Other.....	1,798	1,837	Metals, and manufactures of:		
Coal, coke, etc.:			Boilers, steam.....	1,077	699
Charcoal.....	636	783	Bedsteads, iron.....	896	1,037
Coal.....	1,325,881	1,338,915	Rolls.....	2,181	2,191
Coke.....	13,559	10,966	Castings.....	16,584	14,137
Cement.....	41,304	36,415	Copper.....	1,358	1,777
Chemicals, drugs, etc.:			Hardware.....	4,871	5,358
Acid.....	1,432	1,306	Machines and machinery..	12,843	14,416
Bleaching powder.....	3,466	3,437	Nails.....	2,690	2,744
Chemicals and drugs.....	1,335	1,452	Pig iron.....	12,807	13,025
Oils—			Rivets.....	4,610	3,859
Paraffin and petro- leum.....	84,251	29,595	Sheet and plate iron.....	35,522	21,438
Other.....	10,900	9,685	Steel.....	65,889	68,272
Paints.....	2,811	3,373	Wrought iron.....	36,297	35,848
Soda.....	6,121	6,323	Paper.....	15,131	15,376
Soda ash.....	4,563	4,066	Seeds.....	5,006	4,929
Vitriol.....	1,186	779	Soap.....	3,373	4,008
Confectionery.....	3,388	3,658	Sugar.....	35,578	35,952
Earthenware, glass, etc.:			Textile materials and manu- factures of:		
Bottles.....	11,348	12,915	Cotton, raw.....	12,509	13,150
Glass.....	3,541	3,754	Flax.....	33,976	30,941
Slates.....	9,492	8,086	Hemp.....	14,103	13,356
Tiles.....	9,489	8,300	Jute.....	193	87
Fertilizers.....	20,199	16,274	Linen.....	5,323	5,554
Fruit and vegetables:			Tow.....	4,827	5,075
Apples and pears.....	2,319	3,071	Wool.....	724	632
Dried.....	8,028	2,727	Waste materials.....	3,831	2,387
Green and preserved.....	4,555	5,892	Woolens.....	2,213	2,182
Oranges.....	3,585	3,885	Yarns—		
Onions.....	5,840	5,912	Colr.....	463	494
Grain, flour, etc.:			Jute.....	548	513
Barley, unmanufactured..	21,962	21,172	Linen.....	7,738	7,248
Bran.....	15,082	14,564	Cotton.....	4,130	4,137
Cottonseed cake and meal.	10,501	12,819	Woolen.....	677	907
Feeding meal.....	8,563	8,993	Tobacco:		
Flour.....	85,569	96,445	Manufactured.....	658	638
Indian corn.....	219,725	214,457	Unmanufactured.....	4,403	7,255
Linsed cake.....	11,587	9,116	Wood, and manufactures of:		
Oats.....	10,400	7,168	Boards, planed.....	110,363	114,482
Rye.....	15,416	12,518	Deals.....	1128,634	183,593
Wheat.....	113,951	96,167	Boxes.....	13,734	13,615
Lard.....	3,040	2,085	Mahogany.....	2,412	2,005
			Lath wood.....	1,266	1,162
			Timber.....	133,271	138,890

¹ Loads.—A load of square timber is 50 cubic feet, unhewn 40 cubic feet, inch planks 600 superficial feet.

General Export Trade.

The export trade in aerated waters manufactured at Belfast is annually becoming more important with the increasing fame of the local brands. In 1911 the United States alone imported ginger ale from Belfast to the value of \$103,332. The exports of biscuits showed a slight increase over 1910, and this trade experienced a record year. Motor delivery service brought about a great expansion in the local trade of one biscuit firm. A plant of the most up-to-date type has been installed to cope with the demand for the various kinds of biscuits.

The exports of butter from Belfast also showed a small increase, and the prices realized during the greater part of the year were very satisfactory, owing to the decreased output of many of the butter-producing countries. It is said that Irish butter could compete with the Danish product if the farmers would take up winter dairying so as to make a supply available during the entire year.

The exports of confectionery from this port, amounting to 2,139 tons, showed an increase of 104 tons over 1910, and the home business also showed a proportionate increase. This industry was naturally hampered by the high price of sugar.

The principal exports to all countries from Belfast during 1910 and 1911 were as follows, the tons being of 2,240 pounds:

Articles.	1910	1911	Articles.	1910	1911
Animals:	<i>Number.</i>	<i>Number.</i>	Lard	<i>Tons.</i>	<i>Tons.</i>
Cattle.....	149,793	125,509	.....	3,658	3,064
Pigs.....	12,700	13,890	Machines and machinery.....	9,915	9,939
Sheep and lambs.....	26,137	27,850	Potatoes.....	51,858	86,750
Horses.....	7,262	7,718	Pork.....	1,448	1,310
Bacon	<i>Tons.</i>	<i>Tons.</i>	Poultry.....	2,837	2,304
Biscuits.....	8,347	9,097	Seeds, grass.....	17,171	20,236
Beverages:	1,334	1,433	Textiles:		
Aerated waters.....	11,621	13,612	Cordage.....	8,435	8,865
Whisky.....	23,049	23,123	Cottons.....	7,761	8,816
Butter.....	2,373	2,397	Linen.....	59,907	54,775
Coal.....	20,064	34,436	Rope.....	3,140	3,056
Confectionery.....	2,035	2,139	Thread.....	1,758	1,860
Cotton, raw.....	12,856	13,065	Tow.....	304	324
Eggs.....	13,497	13,575	Yarn, linen.....	9,652	9,511
Felt.....	19,553	19,301	Tobacco, manufactured.....	4,406	4,618
Fertilizers.....	9,175	8,615	Turf.....	2,455	2,352
Flax.....	3,447	3,585	Waste, flax, hemp, etc.....	9,704	9,328
Flour.....	18,597	12,447	Wood, and manufactures of:		
Hay.....	6,172	15,553	Boxes, empty.....	17,247	18,543
Hams.....	3,384	3,552	Timber.....	18,725	18,062
Indian corn.....	61,613	37,130	Wool.....	361	377
Iron:			Woolens.....	721	712
Ore.....	51,457	40,865	Yeast.....	3,564	3,531
Scrap.....	24,629	21,095			

¹ Loads.

Exports to the United States.

The exports to the United States from Belfast during 1911 showed a decrease of \$792,072 compared with the 1910 exports, and were \$1,444,039 below those of 1909. Manufactured textiles formed 87 per cent of the total 1911 trade, linen manufactures alone making up 78 per cent. The total value of the linens exported was \$920,960 less than that of the 1910 shipments. Heavy decreases were also shown by union and cotton goods. Other features of interest in the trade with the United States were the increase in the shipments of flax and the heavy potato exports.

The exports, according to consular invoices, from Belfast to the United States during 1910 and 1911, were as follows:

Articles.	1910	1911	Articles.	1910	1911
Cartons.....	\$5,678	\$4,202	Machinery.....	\$110,820	\$96,357
Cotton manufactures:			Nursery stock.....	17,127	23,348
Canvas.....	3,839	1,155	Packing paper.....	1,081	21,335
Damask.....	79,547	68,001	Paper stock.....	73,387	51,086
Handkerchiefs.....	150,138	148,726	Potatoes.....		547,322
Laces.....	1,505	6,836	Preserves.....	4,936	6,132
Plain.....	309,110	163,869	Tow.....	11,988	2,559
Toweling.....	29,869	35,300	Turnips.....	1,170	4,984
All other.....	284,877	3,214	Union goods:		
Felt.....	25,241	35,266	Canvas.....	25,532	32,412
Flax.....	678,017	823,362	Damask.....	121,385	90,563
Fusel oil.....	8,082	18,068	Handkerchiefs.....	145,003	98,484
Ginger ale.....	94,976	103,332	Plain.....	687,328	419,845
Grass seed.....	32,586	54,577	Toweling.....	229,006	257,999
Household effects.....	18,334	4,822	All other.....	20,274	6,768
Linen manufactures:			Whisky.....	124,979	175,911
Canvas.....	1,122,443	1,055,064	Wine.....	30,361	
Damask.....	3,122,305	2,979,397	Woolens.....	7,211	10,579
Handkerchiefs.....	1,727,041	1,589,314	All other articles.....	28,117	41,988
Laces.....	28,622	28,387			
Plain.....	5,030,882	4,567,447	Total.....	16,639,400	15,847,328
Thread.....	137,302	144,451			
Toweling.....	1,111,538	1,165,875			
Yarn.....	271,229	278,740			
All other.....	726,534	548,361			

The American goods returned during 1911 were valued at \$10,224.

The exports to the Philippine Islands amounted to \$8,189, as against \$12,628 in the previous year. The articles for 1911 were: Linen manufactures, \$6,076; union goods, \$1,306; cotton goods, \$155; felt, \$456; and jute canvas, \$196. Those to Porto Rico in 1911 were valued at \$2,096, consisting of linen goods, \$1,500; and union goods, \$596. To the Panama Canal Zone were sent linen goods with a value of \$327. There were no exports to the Hawaiian Islands in 1911.

The tonnage of the vessels clearing from Belfast during 1911 aggregated 2,841,553 tons, as compared with 2,800,285 tons in the preceding year. There were 437 arrivals from foreign ports during the year.

LONDONDERRY AGENCY.

[By Consular Agent Phillip O'Hagan.]

The chief industries of Londonderry are the manufacture of shirts, collars, underclothing, and ladies' corsets. There are several factories engaged in the three first-named industries, and about 2,000 workers are employed throughout the year, besides a large number in the rural districts where the manufacture of shirts and collars is carried on in the cottages. This rural work is conducted by means of agencies scattered throughout the small towns and villages.

About 90 per cent of those employed in these industries represent women, and their average wage is \$3 per week. Some of the more skillful and experienced operators earn \$5 to \$6. The finished products of the Londonderry shirt and collar factories find their way to practically all the markets of the world. Considerable quantities go to the United States, but as all the local factories of any importance have warehouses in London, Manchester, and Glasgow, the goods are invoiced at those places for shipment and therefore are not credited to this agency. The factories are well equipped, and the comfort of the workers is carefully considered.

Shipments of Live Stock—Minor Industries.

Besides the exports of shirts, collars, and underclothing, practically the only shipments from here are agricultural produce and live stock. There were shipped to Great Britain last year 83,801 head of live stock, against 111,633 for 1910. The principal exports last year were: Cattle, 57,171; sheep, 23,116; pigs, 2,241; and horses, 264. Considerable shipments of poultry, eggs, and dairy products are also made to Great Britain.

In addition to the local industries given, there is a tanyard, a shoe factory, five bacon-curing factories, and a distillery. It is the largest distillery of patent still in Ireland, the produce being used principally for blending.

The possibility of the local shipbuilding yard resuming operations in the near future is doubtful. This yard has many advantages. There are facilities for building and launching vessels of 4,000 and 5,000 tons, and the yard is equipped with fairly suitable buildings. The port and harbor commissioners are willing to rent it free or at a nominal figure to any reliable shipbuilder.

Shipping and Exports to United States.

Two lines of steamers ply regularly between here and the United States, the Anchor and the Allan Lines. The tonnage of the ships arriving at the port last year from trans-Atlantic ports was 290,322, compared with 274,099 for 1910, while the shipping leaving for trans-Atlantic ports amounted to 650,323 and 633,000 tons for 1911 and 1910, respectively. The great difference between the tonnage of the departing and arriving trans-Atlantic shipping is due to the fact that Canadian steamers westward bound rarely call here but go direct to either Glasgow or Liverpool. The port and harbor revenues for last year amounted to \$109,000 compared with \$106,100 for 1910.

The exports to the United States invoiced at the consular agency at Londonderry during 1911 were valued at \$169,837, as compared with \$156,736 in 1910. The items in 1911 were: Pickled herrings and mackerel, \$160,554; whisky, \$1,805; woolen goods, \$2,417; potatoes, \$4,799; hand-knitted gloves, \$262.

CORK.

[By Consul George E. Chamberlin.]

The improvement in the general trade conditions of southern Ireland noted during 1910 continued during 1911. The railway and seamen's strikes last fall caused considerable loss to transportation companies, but they were of short duration and trade soon resumed its normal condition. The price of farm produce was much above the average, crops were good, and on the whole farmers and merchants report a very satisfactory year.

The output of bacon and hams exceeded that of 1910, when the exports were valued at over \$17,000,000. The manufacture of woolen goods is not extensive in this district, being carried on by a number of small mills, the largest of which, located at Blarney, employs some 600 hands. The output of these mills was somewhat larger than that of the previous year. There was also an increase in the manufacture of boots and shoes, while in the furniture, hand-made lace, distilling, brewing, and fishing industries the volume of business was about the same as in 1910.

The grain market was unsteady. During the first 3 months of the year wheat sold at \$1.01½ per bushel, corn at 60½ cents, and barley at 56½ cents per bushel. On September 1 wheat had advanced to \$1.19½ per bushel, and in December corn and barley advanced to 88 cents and 76½ cents per bushel, respectively.

A new dry dock was opened in September at the shipyard at Haulbowline, which will accommodate the largest war vessels. The number of men employed in the yard was increased from 1,000 to 1,050, and work was plentiful throughout the year.

Import and Export Trade.

There are no statistics available showing the import and export trade of this district in 1911, but merchants thus engaged have experienced a good business, and it is believed that this trade, which is chiefly with England, will show a fair increase over the previous year.

The following table shows the principal imports, by quantities, into Cork during 1909 and 1910, being the latest statistics available:

Articles.	1909	1910	Articles.	1909	1910
Arms and ammunition..cwt..	1,222	1,026	Malt.....cwt..	64,905	54,322
Breadstuffs:			Oils:		
Barley.....do.....	43,848	45,648	Petroleum and paraffin,		
Biscuits.....do.....	6,833	5,760	gallons.....	558,252	537,840
Bran and pollard...do....	118,608	146,194	Other.....cwt..	66,039	60,273
Corn.....do.....	1,787,592	1,575,631	Paper and manufactures of,		
Flour, wheat.....do....	294,262	316,615	cwt.....	69,471	71,214
Meal.....do.....	52,454	50,431	Provisions:		
Oats.....do.....	45,951	33,680	Dairy products—		
Wheat.....do.....	1,447,505	1,092,974	Butter.....cwt..	1,973	1,502
Brushes and brooms..do....	2,942	2,689	Cheese.....do....	2,948	2,850
Candles.....do.....	15,337	12,954	Meat products—		
Cement.....tons.....	13,718	14,526	Bacon.....do....	60,772	32,950
Chemicals, drugs, etc..cwt..	66,765	74,406	Beef.....do....	35,285	34,196
Coal.....tons.....	467,298	488,924	Lard.....do....	6,292	4,619
Cocoa.....pounds.....	396,032	389,872	Mutton.....do....	9,671	9,240
Coffee.....do.....	180,768	169,344	Seeds.....do....	14,524	12,436
Confectionery.....cwt..	5,420	4,731	Soap.....do....	20,348	13,172
Earthenware.....do....	59,764	44,084	Spirits and wines..gallons..	241,530	246,071
Fertilizers.....tons.....	20,885	27,311	Sugar.....cwt..	346,600	308,978
Fish.....cwt.....	53,586	47,637	Tea.....pounds..	4,746,112	4,389,392
Fruit:			Tiles and bricks.....cwt..	48,324	48,161
Apples and pears...do....	14,246	14,445	Tobacco, and manufactures of:		
Oranges.....do....	19,136	16,431	Manufactured.....pounds..	205,004	106,128
Preserved.....do....	16,524	13,658	Unmanufactured..do....	309,986	347,820
Other.....do.....	20,560	20,689	Vegetables.....cwt..	17,978	14,086
Glass and glassware..do....	50,735	27,572	Wood, and manufactures of:		
Iron and steel, and manufac-			Furniture.....cwt..	9,432	8,685
tures of:			Lumber.....loads..	18,541	24,043
Bar and wrought...tons..	6,800	6,956	Staves.....tons..	663	1,695
Bolts.....do.....	1,399	1,128	Wool.....pounds..	1,061,872	1,276,240
Hardware.....do....	10,546	8,855	Yarns.....do....	1,782,928	1,650,880
Leather, and manufactures of:					
Boots and shoes.....cwt..	14,126	13,547			
Leather.....do.....	3,309	1,014			

The principal exports, in quantities, from Cork during 1910 are shown by the following table:

Articles.	Quantities.	Articles.	Quantities.
Animals:		Provisions—Continued.	
Cattle.....number..	100,816	Butter.....cwt..	217,387
Sheep and lambs.....do....	65,184	Milk, condensed.....do....	78,838
Swine.....do.....	16,155	Lard.....do....	11,763
Eggs.....do.....	5,438,520	Margarin.....do....	17,060
Fish.....cwt.....	70,540	Pork and ham.....do....	11,379
Hides.....do.....	29,498	Poultry.....do....	11,708
Oats.....do.....	243,638	Tobacco, manufactured..pounds..	18,775
Paints, varnishes, etc..do....	40,900	Whisky.....gallons..	137,274
Provisions:		Wool, raw.....pounds..	1,131,648
Bacon.....do.....	153,375	Wood, lumber.....cubic feet..	847,800

Shipping and Emigration—Trade with the United States.

The registered tonnage entering the port of Cork (Queenstown) during the year ended July 31, 1911, was 4,325,214 tons, of which trans-Atlantic liners, discharging passengers and mail only, made up 3,341,123 tons. These liners take on and discharge no cargo at this port. The total number of passengers embarking at Queenstown for the United States during 1911 was 25,214, divided into 5,544 cabin and 19,670 steerage. The total for 1910 was 33,696.

The sale of American automobiles increased materially in southern Ireland during 1911, and it is believed that with more thorough representation this trade could be extended. The chief imports from the United States are: Cotton, flour, corn, illuminating oil, barley, wheat, tobacco, lumber, cotton seed, boots and shoes, meat and dairy products, etc. Sales would be increased in many of the above lines through proper representation, as well as in many other lines which at present have a limited sale, such as hardware, motor boats, tools, farm implements, tinned fruit, tinned vegetables and provisions, stoves, machinery, adding and computing machines, etc.

The declared exports from this consular district decreased from \$261,453 in 1910 to \$233,518 in 1911, chiefly owing to the falling off in pickled mackerel shipments, which, together with hides and skins, are the principal exports to the United States.

The following comparative statement shows the value of merchandise declared at the consulate at Cork and the consular agency at Limerick for export to the United States during the past two years:

Articles.	1910	1911	Articles.	1910	1911
Bacon.....	\$9,281	\$13,124	Paintings.....		\$170
Bulbs.....	288	212	Photographic materials.....	\$60	1,371
Church vestments.....	294	102	Silverware.....	148	170
Hides and skins.....	120,322	125,054	Whisky.....	3,013	3,762
Horses.....	270	389	Woolen goods.....	1,447	677
Lace and crochet.....	6,010	3,378	All other articles.....	8,015	
Mackerel.....	106,916	80,702	Total.....	261,453	233,518
Magnesia.....	5,359	4,407			

[From the London Times.]

University Education in Ireland.

The commissioners who were intrusted with the launching of the National University of Ireland and its constituent colleges completed their work last July. By the financial clauses of the university act, Dublin was allotted an annual grant of \$176,000, Cork \$97,000, and Galway \$58,000. The original endowment of the Royal University of Ireland was divided between the National University and Queen's University, Belfast; \$730,000 was given for building to the new university and college in Dublin, \$68,000 to University College, Cork, and \$29,000 to University College, Galway. The Cork college has since built chemical and physical laboratories which compare in space, equipment, and general excellence with those of any university in the British Isles. The authorities of University College, Dublin, were compelled to postpone their building operations, owing to the difficulty of obtaining a suitable site, until Lord Iveagh gave an excellent site adjacent to the old Royal University of Ireland. So far no provision has been made in the Dublin college for technological subjects, but it is probable that the Royal College of Science will be "recognized" for the purpose. St. Patrick's College, Maynooth, was admitted to "recognition" by the senate on February 23, 1910. In 1911 the request for "recognition" from two women's colleges in Dublin was refused. There has been a significant increase in the number of students seeking university education since the establishment of the National University.

Soon after the passing of the university act a strong agitation sprang up in favor of making Irish compulsory for matriculation. The senate decided to make a course

in Irish obligatory for those who did not take it at matriculation until 1913, in and after which year it was to be obligatory for matriculation.

Scholarships have been provided by the different counties and other scholarship endowments have been provided by private individuals and the colleges. The students' fees for the courses in the different faculties are approximately the same for each constituent college. For the full course the fees in the faculties of arts and commerce are \$48 for the session; in engineering, \$78; in medicine, \$83; and in science, \$68. Each college conjointly with the external examiners who are unconnected with any of the constituent colleges, conducts its own examinations, confers its own degrees, and thus practically performs all the essential functions of an independent university.

SOUTH MANCHURIAN NOTES.

[Collated from local papers by Consul Albert W. Pontius, Dalny.]

New Fertilizer Factory—Fushun Coal—Fruit Raising.

A \$100,000 fertilizer manufactory is under project at Dairen (Dalny) which plans to produce phosphoric acid, ammonia, animal bone, etc.

The demand for Fushun coal in Manchuria increases. It barely reached 130,000 tons in the working year 1908, increased to 218,000 tons in 1909, to 347,000 tons in 1910, and further to 460,000 tons during the working year 1911 ended on March 31 last. This does not include bunker coal.

The agricultural experimental station, Dairen, has distributed free of charge recently about 30,000 apricot, peach, and plum trees to applicants in the Leased Territory, and is growing 50,000 additional trees for next year's distribution.

Import of Formosan Sugar.

The import of Formosan sugar from Takao to Manchuria, via Dairen, is increasing steadily. From 346 tons (at the rate of 15 bags per ton) in 1910 it increased to 1,446 tons in 1911, which formed more than 20 per cent of the total imports. The Osaka Shosen Kaisha has opened a regular steamer service between Dairen and Formosan ports from April 1, which will greatly facilitate the import of Formosan sugar. The output of sugar in Formosa last year, together with the stocks brought forward from the preceding year, is put roughly at 4,515,000 bags, including white, brown, and black varieties. Granting that 3,200,000 bags find their way to Japan this year, 1,300,000 bags will be left for export abroad.

South Manchuria Railway Improvements.

The second installment (\$3,000,000) of the South Manchuria Railway Co. share capital to be called up by June 1, 1912, at the rate of \$30 per share of \$100, will be employed for the improvement of the harbor facilities at Dairen, the completion of what little work there is left on the Mukden-Antung line, and sundry other undertakings maintained by the company. The management denies the rumored promotion of some new enterprises. Although the company's accounts are to be closed once annually, instead of semiannually as heretofore, semiannual dividends will be continued.

Storage of Bean Oil in Bulk.

The South Manchuria Railway Co. management arranged for the storage of bean oil in bulk from April 10. The company undertakes the examination of bean oils intrusted to its custody, upon its own account. The method of examination is to be very simple. Expert examiners will inspect the oils for storage in the presence of their owners and will pass their opinions on the goods, which are to be tacitly indorsed by the company. It is understood that the company will hold itself responsible for only 99 per cent of the original quantity. The storage charge will be 40 cents per ton for every 10 days or less, in place of 25 cents as formerly.

Seismograph of the Omori System.

A seismograph of the Omori system, invented by Prof. F. Omori, the highest authority on seismology in Japan, has arrived recently at the meteorological observatory, Dairen. This instrument is of the best improved type in use, and is capable of registering the velocity of all seismic shocks two hundred fold. It is arranged to give a complete record of every particular of an earthquake movement which may occur in any part of the world.

FOREIGN TARIFFS.**ARGENTINA.**

[From Board of Trade Journal, Mar. 21, 1912.]

Proposed Tariff Commission.

On February 21, 1912, the Chamber of Deputies of Argentina passed a bill for the appointment of a permanent tariff commission, to be known as a Valuation Board (Junta de Aforos). The duties of this board shall be as follows: To draw up periodically projects for the modification of the valuations in force; to propose such reforms in the customs duties and in the customs regulations as experience shows are necessary, and which, if accepted by the Executive, may be submitted for the consideration and approval of the legislature; to advise the Executive and the committees of the legislature regarding petitions, projects, and matters relating to customs exemptions and reductions or increases in the import duties; and to deal with all matters concerning the publication of customs tariffs and supplementary lists of changes in duties or valuations. The bill contains certain stipulations for the manner of procedure of the board.

AUSTRALIA.**Denaturation of Edible Vegetable Oils.**

Customs regulations for the denaturation of edible vegetable oils imported for industrial uses, in effect from December 1, 1911, were published in the Commonwealth of Australia Gazette for January 20, 1912. A copy of the regulations is on file in the Bureau of Manufactures.

CANADA.

[From Consul General John G. Foster, Ottawa.]

Admission of Workmen's Tools.

Complaint has been made by American firms because duty is collected in Canada on boxes of tools imported into Canada for use in erecting machinery for woolen mills. In this regard the Canadian Department of Customs holds that workmen coming into Canada are allowed to bring in free of duty tools which belong to them personally, but there is no customs provision under which free admission is authorized for the tools which belong to a company, although such tools are sent to Canada to be used by men who are in the employ of that company.

I understand that if the workman should become the owner of the kit of tools, so that he could swear that they were his personal property, the tools, as tools of trade, would be admitted free of duty, provided that they were imported at the time the owner entered the country.

Government Grain Regulations.

There is on file in the Bureau of Manufactures a copy of an act assented to April 1, 1912, known as the Canada Grain Act. This act provides for the appointment of a board of three grain commissioners, for the division of the country into sections for grain inspection, and for general Government oversight in matters of warehousing, grain elevators, and standardization of grain.

FRANCE.

[From Journal Officiel, Apr. 13, 1912.]

Customs Regulations for Meat in Transit.

The Minister of Agriculture of France has reversed the ruling for the customs treatment of meat in transit published in customs circular of October 23, 1911. [See Foreign Tariff Notes, No. 6, p. 189.] It was held in the former ruling that fresh meat and chilled or frozen meat in transit through France were subject to inspection by a veterinarian at the time of entry into the country and consequently liable to the fee of 1 franc per 100 kilos for the examination. The present order is to the effect that such meat in transit is not subject to the examination by a veterinarian at the time of entering the country and is not liable to the fee.

In case the meat which has passed through France in transit to another country is refused entry in the country of destination, the meat will not be allowed to remain in France, and the French customs authorities are empowered to decide what shall be done with it.

GREECE.

[From British Board of Trade Journal, Mar. 14, 1912.]

Reduction of Duty on Sugar.

The British Government has been informed that a Greek law reducing the rate of customs duty on cane and beet sugar, sugar made from fruit and starch, and sirups derived from sugar, to 45 drachmas paper per 100 kilos (about 3.9 cents per pound) has gone into effect. [See Foreign Tariff Notes, No. 6, p. 178.] The former rate on sugar was about 7.4 cents per pound.

A decree under this law was published providing for the manner of packing for all sugar, whether imported or of domestic manufacture.

PORTUGAL.

[From Diario do Governo, Apr. 16, 1912.]

Free Importation of Fruit from Colonies.

By a decree of the Portuguese Government of April 13, 1912, it was announced that fresh fruits and dried fruits imported into the country from the Portuguese colonies should be exempt from customs duty.

RUSSIA.

[From Vyesnik Finansov, 1912.]

Duty on Compounds for Dipping Animals.

The following subsection has been added to tariff No. 91 of the Russian customs tariff:

(3) Products for dipping and healing animals: In powder form, 0.30 ruble per pood (\$0.43 per 100 pounds); in liquid form, gross weight, 0.25 ruble per pood (\$0.36 per 100 pounds). The products mentioned may be imported according to special lists prepared by the Veterinary Commission with the approval of the customs department, provided the consignments be duly accompanied by certificates issued by officials or institutions of the principal administration of

domestic economy and agriculture, to the effect that the products are intended for dipping or healing animals.

Continued Free Admission of Vessels.

The law of July 1, 1908, continuing the free admission of seagoing vessels is maintained in force until January 1, 1913.

SALVADOR.

[From Consul General Harold D. Clum, San Salvador.]

Increase in Duty on Galvanized-Iron Roofing.

The Government of Salvador, in order to place the importation of improved roofing on more favorable terms of competition with galvanized-iron roofing, has increased the duty on galvanized-iron roofing. The former duty on galvanized-iron roofing was 3 centavos silver (about 1.2 cents) per kilo (a little more than one-half cent per pound), and no surtaxes were applicable; now an "aforo" of 1 centavo per kilo has been imposed, making the duty, with surtaxes, amount to a little more than 3 cents per pound.

SWEDEN.

[From Handelsberichten, Netherlands, Apr. 18, 1912.]

Reduction of Duty on Oats.

The Dutch minister at Stockholm has reported that the Swedish Riksdag on March 23, 1912, voted to reduce the duty on oats and oatmeal from 6.50 crowns to 3.50 crowns per 100 kilos (from 79 cents to 43 cents per 100 pounds).

TRIPOLI.

[From Moniteur Officiel du Commerce, France, Apr. 11, 1912.]

Port Charges.

The Italian acting governor of Tripoli has published a list of port charges which will be collected in the ports of Tripoli. These taxes fall under the heads of sanitary and lighthouse dues and are based on tonnage.

THE RUSSIAN BUDGET.

A digest of the Russian budget for 1912 (a summary of which appeared in Daily Consular and Trade Reports on Nov. 6, 1911), especially as to the revision made therein by the budget committee, has been embodied in a lengthy report by Consul General John H. Snodgrass, of Moscow, who says: "The credit allowed to the Ministry of National Education has been raised by 70,000 rubles (\$36,050) for the construction of a chemical laboratory at Kharkoff University." Also "A new pension system for the benefit of civil servants is being devised, and the Government expects to be able to present the same to the Duma this year. This will cause a large increase in the demands upon the treasury." The budget also provides for the construction of four men-of-war for the Baltic Sea; three men-of-war, nine torpedo boats, and six submarines for the Black Sea.

Consul General Snodgrass's complete report will be loaned by the Bureau of Manufactures to those interested.

UTILIZING LOW-GRADE COAL.

The University of North Dakota has been conducting some interesting experiments on the utilization of lignite for gas making and in the manufacture of briquets. A plant operated by the School of Mines of the university has been located at the mining substation at Hebron. In a letter to the United States Geological Survey, dated April 23, 1912, Prof. E. J. Babcock, dean of the College of Mining Engineering, says:

We are doing a very large amount of research work at this plant on the use of various binders, the best methods of preparing the coal, as well as the best methods of mixing and pressing. We are improving our plant and enlarging it so as to get data more nearly approaching those of a commercial plant. Thus far we have made but small quantities of briquets, but by the methods which we are working out we have gotten very excellent results.

The briquets are of high grade, stand well in the fire and on exposure to atmospheric agencies. They are of high heat value, being raised from 7,500 or 7,800 in the raw lignite to about 12,000 British thermal units in the finished briquets. After the improvements are completed, which we are now making, our experimental plant will be able to run uniformly at a rate of 10 tons per day. We operate a gas plant in connection with the lignite plant, thereby generating gas from lignite and briquetting the residue. This residue gives a high heat unit briquet.

We condense about $1\frac{1}{2}$ tons of raw lignite into 1 ton of briquets in this manner. The gas and other by-products are saved. We derive approximately 10,000 cubic feet of 400 British thermal unit gas per ton of reasonably dry lignite. We have tried a great variety of binders and methods.

The production of coal in North Dakota in 1911 was 502,628 tons, valued at \$720,489, or about five times as great as in 1910. The Survey adds:

The development and utilization of the lignites of North Dakota, as of Texas, must depend on relatively local markets, for as they disintegrate rapidly on exposure to the atmosphere they do not bear long transportation and must be used a short time after being mined. Lignite is not a high-grade fuel and on account of its large moisture content does not reach high temperatures in combustion. It is therefore undesirable for steam raising, though it can be used for that purpose in specially constructed furnaces with large grate areas. It does, however, serve fairly well for a domestic fuel where other coals are obtainable only at a high price. It has also been found, on account of its smokeless and sootless qualities, well adapted for burning brick, one of the few manufacturing industries of North Dakota, and considerable quantities are burned each year in brick kilns at Dickinson, Scranton, and Kenmare.

PHILIPPINE BUSINESS NOTES.

[From the Manila Free Press.]

New armory.—The recently chartered Memorial Association of the V. A. P. has bought 13,000 square feet of land in Manila on which a \$15,000 armory for the order will be built.

Oil in Philippines.—The Division of Mines, Bureau of Science will make a geological survey of Tayabas Peninsula, following a topographical survey to be made by the Bureau of Lands. The survey work is to determine the presence of oil in paying quantities. At present there are about 100 placer petroleum claims in this Province.

Agricultural bank.—Twelve branch agencies of the agricultural bank of the Government have been started in provincial capitals since January 1. The agencies have been placed in charge of provincial treasurers, who will confine themselves for the present merely to receiving deposits and carrying a checking account.

New American bank for Philippines.—W. Morgan Shuster, who accepted a position as foreign agent of the National City Bank of New York, is expected, on the completion of his tour of South America, to visit Manila with the view of the establishment of a branch of the bank here. Besides the institutions already established here, there is the French Agricultural Bank, whose advent in the Philippines is assured, and the likelihood of provincial banks to be founded as a result of propaganda started by the Filipino Economic Association. There must be taken into account also the plan for provincial banks being carried out by the Bank of the Philippines.

GOLD DISCOVERIES IN VENEZUELA.

[From Consular Agent W. Henderson, Ciudad Bolívar.]

Some very rich discoveries of gold have been made in the interior of Venezuela. One, in the municipality of El Callao not far from the Yuruari River, has been named Salva la Patria. It is calculated that up to now (Apr. 15) this mine has yielded over 35,000 ounces of fine gold. During the month of March more than 6,000 ounces arrived at Ciudad Bolívar, and in the first two weeks of April the arrivals amounted to more than that, and the gold is coming in all the time.

Near the Caroni River and also in the Paragua district gold has been taken out, but not in such large quantities. The extremely low level of the water in the Caroni River caused a small island to appear in its course, and from this some gold was taken; but the river is now rising and has covered the island, so that work there has necessarily ceased.

The Situation at Salva la Patria—Mining Titles.

The following statement appeared in a letter from a merchant in the interior, in which he writes about the Salva la Patria.

There are two barrancas (shafts) dug by a group, which are simple pools of gold. I have seen eight pieces of more than 40 ounces each, all containing more gold than stone. With such barrancas the greatest disorder prevails; outside people get in at night and have taken out more gold than the owners themselves, who have had to fence up the approaches and have an armed guard at night.

Of course the Government will soon restore order, and one does not now hear of any disturbance. There are some 2,000 men digging or exploring around the Salva la Patria, and of course all are not successful. From what I understand, the gold is found in pockets or chimneys 50 to 100 feet down, and not in true veins.

Permits to work may be granted by the jefe civil (mayor) of the district; afterwards the titles must be taken out in Caracas from the National Government. The maximum permit is for 200 hectares 494.2 acres and for a term of 90 years.

Transportation Difficulties—Work in Progress.

It is a well-known fact that the interior of Venezuela, even where gold has been discovered, has up to now only been scratched over, and the larger part has not been explored, so these discoveries must continue. The gold now coming in is of a very fine grade, and as it is almost a free gold there is very little expense in getting it out; but on account of various difficulties and high freight rates, due to inadequate transportation facilities, a quartz mine has a hard time trying to make both ends meet.

The only companies now working are the Gold Fields of Venezuela, an English concern which has not paid any dividends, but which is bringing in machinery and securing surrounding mines at low prices; and a French company, which is opening La Experiencia mine, situated between El Callao and Guasipati, with shafts and galleries, and expects to begin working in a few months.

The old El Callao mill is crushing some quartz for private parties and is working the sands with the cyanide process. The directors of this group of mines have at last adjusted all their difficulties with the Venezuelan shareholders and propose to reorganize with a French company. If they can get the \$500,000 working capital they ask for, there is no doubt but that there will be a boom in the interior, as with the marvelous discoveries of gold lately the outlook is bright.

Concession for Railway to Gold Fields.

Commenting on the foregoing report, Consul Thomas W. Voetter, of La Guaira, writes: "Consular Agent Henderson mentions the difficulties and costs consequent on a lack of transportation facilities to the gold-bearing regions. Information concerning a concession for a railway to this section was published in Daily Consular and Trade Reports on July 20, 1910. It has been stated that American capital is desired to build this road, rather than English. The fact that this line would approach the borders of a British colony may be the explanation for the reported preference. The recent discoveries of gold render this railway project of more importance than before and may tend to make the construction of a line to that section more certain."

THE FORMOSAN BUDGET.

[From Consul Samuel C. Reat, Tamsui.]

Formosa's revenue and expenditures for the fiscal year 1912 balance at \$22,662,754. Ordinary receipts are placed at \$19,028,580 and extraordinary at \$3,634,174. Ordinary budget outlays aggregate \$13,707,647. The extraordinary expenditures, aggregating \$8,955,107, include several enterprises of commercial importance. These latter appropriations embrace \$600,000 to be applied to irrigation works, \$489,000 for Takao harbor works, and \$378,500 for Taito railway construction. For new buildings at Taihoku hospital \$200,000 has been allotted, and much other construction and repair work is provided for.

The sum of \$25,000 is set aside for dredging Tamsui harbor, \$344,775 for Keelung harbor works, \$267,500 for Takao waterworks, \$80,000 for Kagi waterworks, \$100,000 for Tainan waterworks; \$475,000 is apportioned to the extension of the through railway and \$70,000 for double-tracking the Taikoku-Keelung line. Ship subsidies amount to \$506,966. The total sum apportioned to "industrial encouragement" is \$402,786, of which \$50,000 is to be spent in expanding the tea market, \$85,863 for the encouragement of silkworm culture, and large sums have been included for agriculture, stock-raising, forestry, and the fisheries. A special appropriation of \$675,000 was made for railway equipment.

ARGENTINE MEAT FOR AUSTRIA.

[From Consul J. I. Brittain, Prague, Austria.]

The Austro-American Steamship Co. was granted permission to import Argentine meat into Austria, and for that purpose chartered the *Gulf of Venice* to transport 700 tons of this meat, two-thirds of which was intended for Vienna and one-third for other large Austrian cities.

The meat arrived at Trieste in March. The board of directors of the municipal slaughterhouse at Prague bought 33,000 pounds of first-quality meat at 7.4 cents a pound and sold it to the local butchers at 11.2 cents a pound. This same price was charged butchers of other districts who ordered the meat through Prague. About 4,840 pounds of second-quality meat were purchased at 6.9 cents a pound and resold to butchers at 10.7 cents. The maximum retail prices were 14.8 cents for first quality and 13.3 cents for second quality.

SEWAGE AND SEWAGE FARMS IN ENGLAND.

[From Vice Consul Roger C. Tredwell, Burslem.]

The sewage works of this district are of considerable interest. There are six of these works in the county borough of Stoke-on-Trent, one of which is located in each of the federated towns. The bacterial system has been adopted by four of the plants, at the fifth a combination of the bacterial system and broad irrigation, and at the sixth the sewage is treated in tanks with ferrozone and afterwards discharged into polarite filters.

Burslem, Fenton, and Hanley.

At Burslem (population 43,000) the bacterial system consists of screen chambers in duplicate, fitted with power-driven screens, detritus tanks which have a capacity of one-twelfth the D. W. F., three open septic tanks, and two storm tanks. The bacteria bed covers an area of 20,200 square yards. The tank effluent is pumped into the bacteria beds, and is disposed of by rotary power-driven distributors. The effluent from the filters passes into a tributary of the River Trent. A pressing scheme is being considered for the disposal of sludge. This system is designed to deal with six times the D. W. F. of 800,000 gallons.

At Fenton (population 26,000) the bacterial system is designed to deal with twice the D. W. F. of 500,000 gallons on the bacteria bed area, the remaining volume up to six times the D. W. F. being dealt with on the contact beds. These are four in number with an area of 2,080 square yards. The plant consists of screen chambers in duplicate, four detritus tanks, four open septic tanks, and a bacteria bed with an area of 5,000 square yards. There are power-driven distributors drawn from end to end of the beds with an endless rope. There are contact beds for dealing with storm water and five sludge beds for sludge disposal. A portion of the land surrounding the works is used for irrigation and the effluent is discharged into a tributary of the Trent River.

Hanley (population 68,000) has a bacterial system arranged to deal with six times the D. W. F., estimated at 1,800,000 gallons. The plant consists of power-driven screens and chambers in duplicate, three detritus tanks, and eight sedimentation tanks arranged in two levels. The sewage gravitates to the lower tier and is raised by pumps to be treated in the higher tier. There is also an extensive bacteria bed on two levels with an area of 9 acres, on which power-driven distributors are drawn. The liquid after passing through the filters goes direct to the River Trent. The sludge is disposed of by pressers and about 375 tons of cake are produced each month.

Longton, Stoke-on-Trent, and Tunstall.

Longton (population 38,000) has a part bacteria and part broad irrigation system to deal with twice the D. W. F., which is estimated at 1,000,000 gallons on the bacteria bed area. The plant consists of a duplicate set of hand-operated screens and detritus chambers, four sedimentation tanks, and the bacteria bed on which power-driven distributors are used as at Hanley and elsewhere. The effluent after passing through the filters is distributed over 137 acres of the sewage farm. The total area of the farm is 281 acres, of which 210 acres are set aside for the irrigation of tank and filter effluents,

37 for storm water only, and the 34 remaining acres are not available for treatment as sewage. The crops on the farm are rye, grass, corn, and roots, with a large head of cattle.

At Stoke-on-Trent (population 36,000) the D. W. F. is estimated at 1,000,000 gallons, and the system in operation is by tank treatment of the crude sewage followed by intermittent downward filtration and by irrigation on 60 acres. The plant consists of sedimentation tanks and duplicate steam-driven pumps. On leaving the tanks the sewage is distributed through specially prepared beds by means of a hydraulic carrier and is spread over about 60 acres of land. The effluent is discharged into the River Trent. The crops produced on the farm are principally vegetables, roots, and hay.

At Tunstall (population 28,000) the sewage is treated in the tanks with ferrozene and afterwards discharged into polarite filters. The estimated D. W. F. is 500,000 gallons. Six circular bacteria beds have recently been built in order to cope with the total volume of sewage to be treated, which is 3,000,000 gallons. The plant consists of 2 rectangular and 4 circular septic tanks, 3 humus tanks, 10 polarite filters, and 4 circular filters. The effluent is discharged into a tributary of the River Trent.

High Yield of Mangolds.

At the adjacent town of Newcastle excellent results were obtained last year in growing roots on the sewage farm. Two acres in the storm-water area were sown with mangolds in April and 25 tons were secured. Another trial was given to yellow globe mangolds, but before they were sown the land was plowed in such a manner as to permit thorough irrigation from storm-water overflows. Although the land was not soaked with water, it was rendered sufficiently moist to admit of speedy germination. The estimated yield was over 200 tons, with an average of about 40 tons to the acre. The mangolds were grown without the aid of salt or artificial fertilizers, and were not only of excellent shape and very sound, but the roots were also large. Many measured over 36 inches in circumference.

ATHLETIC CONTEST AS A TRADE PROMOTER.

[From Consul Joseph I. Brittain, Prague, Austria.]

The Bohemian International Athletic Contests and Drills are to be held in Prague during the closing days of June and the first of July, in which 15,000 people are expected to participate. About 2,000 are expected from the United States, and the contests will draw 300,000 to 500,000 people to this city at that time. If American exporters can get into communication with business members of the participating societies in New York, Chicago, and Omaha, they could doubtless have them represent some lines of American merchandise while here. Seating to accommodate 150,000 people is being arranged, and nearly all the hotel accommodations have been engaged for the occasion.

An "everlasting match."—Consul Horace J. Harvey, of Fort Erie, reports the manufacture in that Canadian city of a novelty lighter called an "everlasting match," a newspaper description of which will be loaned by the Bureau of Manufactures.

SILAGE MACHINERY OPENINGS.

[From Consular Agent Felix A. Dalmas, Carrara, Italy.]

Tuscany Needs the Silo.

Ensilage is practically unknown in this district, and it would require some time and patience to first interest the people and then teach them the advantages of feeding ensilage. The superficial study I have been able to give the subject shows that the need of the silo to the stock raisers and dairymen of this part of Tuscany is great. A brief outline of the situation will explain this.

The population of Tuscany is about 2,800,000, unevenly distributed over 9,287 square miles of very mountainous country. The two Provinces of Lucca (575 square miles area) and Massa-Carrara (687 square miles area) have a population of about 567,900, or 450 to the square mile, unevenly distributed in favor of the valleys and lowlands.

In other words, here in a land of mild climate, plentiful rains, and fertile land, cattle are kept on winter rations even in summer time. There are no large dairies nor cattle breeders in this immediate district, but there are many small dairy farms, and many producers interested in poultry, hogs, steers, oxen, etc., who, once they learned the economy and other advantages in feeding ensilage, would adopt its use.

With the exception of the foothills and some more or less level highland, the mountains are either barren or poor in soil. The valleys and the plains along the coast are very fertile and thickly populated. The fertile foothills are covered with olive and chestnut groves and vineyards. In the valleys and on the plains, in addition to the abundant grape, vegetables, wheat and other cereals, broom corn, and hay are grown.

Therefore there is little or no grazing land. Cows, steers, and the hundreds of oxen used in the marble and other industries, not to mention other beasts of burden, are kept housed and are fed on dry food the year round. If green food is fed, it probably does not exceed one-tenth. As a consequence the milk produced is very poor in quality and limited in quantity. A high percentage of the butter consumed is brought from the dairies of northern Italy. No good cheese is manufactured (excepting that made from sheep's and goat's milk by the shepherds high up in the mountains) and meat is of an inferior quality usually of overworked oxen killed unfattened.

[From Consul P. Emerson Taylor, Stavanger, Norway.]

Complaint About American Goods.

Two firms here state that there is a market for from 130 to 200 silage cutters per year and that all the machines now sold here are of English and Norwegian manufacture. They say the market is increasing each year, owing to the growth of the dairying industry of the district. One firm gave as the reason why no American machines are now sold here that two years ago an American silage cutter was purchased for trial, and that it gave excellent satisfaction, and that the firm thereupon purchased 20 more; that when the machines came it was found the knives were all too short and were for a machine of different size. After some correspondence and a long delay the American manufacturer sent larger knives, but this time they were for a larger machine and were entirely too long. Rather

than experience another delay, the firm took them to a local blacksmith and had them made to fit the machines. All this resulted in a cost to the firm of some \$50, and resulted further in giving the American machines such a reputation as made it impossible to place more of them on the market. The firm's loss, it is stated, was paid in part by the manufacturer. Of the 20 machines 18 have been sold, and the firm still has 2 of them.

Demonstrations of Machinery—Difficulties to be Overcome.

These two firms both inform me that their method of introducing any farm machinery, especially new farm machinery, is to place one of the machines with one of the leading farmers of the district and make a demonstration of its work, and if it is successful little difficulty is experienced in placing many of the machines in the farming district. This was done in the case of the machine in question, the first machine giving the best of satisfaction; but the evident subsequent blunder nullified all the good results of the first test.

The experience of this firm has been duplicated by other firms in this district more than once during the past year in their experience with other American firms. It is the one thing most discouraging of all to a consul trying to extend the sales of American machinery. There are other difficulties that must be overcome, such as refusal of the American firms to extend the same credit as English and German firms, which results in the necessity of the local firms paying for the machinery sometimes weeks before they see it; the difficulty of securing repairs when the machine breaks; the inconvenience of ordering through some agency in London or Hamburg, and others. But these are difficulties that can be overcome. One experience, however, such as this firm had, usually ends its American purchases and, as in this case, discourages all the other firms of the city from risking a similar experience with the sellers of American machinery.

It would seem that the foreign department of every American firm should realize that it is at least ten times as difficult to correct an error made in a foreign shipment as one made to a firm located merely at the other end of a local or long-distance telephone, and that therefore several times as much care should be exercised in the filling of the foreign orders.

[A previous series on sale for silage machinery appeared in Daily Consular and Trade Reports for January 17, 1912.]

NEW OIL FIELD IN ONTARIO.

[From Consul James M. Shepard, Hamilton, Canada.]

The first high-grade oil found in the Trenton rock in paying quantities is reported at Milton, Halton County, Ontario, on the property of Brandon's brick works, 1,400 feet below the surface. The test well is said to contain 950 feet of oil, which in its crude state is a first-class lubricant. Oil men are rapidly securing lease options on surrounding lands, and already derricks are up and drilling operations commenced. Trade opportunity for oil machinery is open.

Matches used in Paraguay are nearly all of domestic manufacture. Consul Ferris states that they are mostly of wax and retail at seven-tenths of a cent to 1½ cents per box of 40 to 50.

THE PORT OF GLASGOW.

[From Consul J. N. McCunn, Glasgow, Scotland.]

The affairs of the port of Glasgow were conducted by the municipality until the beginning of the nineteenth century, when the municipal authorities formed themselves into a separate body as trustees for the Clyde navigation. Since that time several changes have been made by the addition of representatives of the commerce of the port and of the counties and small towns along the river, and the number of trustees at present is 42. Ten are nominated by Glasgow Corporation, 6 represent the Chamber of Commerce, Merchants' House, and Trade House, 8 are sent by the counties and small burghs, and 18 are chosen by the harbor-dues payers.

Under the constitution of 1858 the trustees were empowered to form the quays and other facilities of a port, and also to deepen, straighten, and widen the river. The result has been that that which was theretofore a narrow and shallow stream can now accommodate with safety steamers carrying 12,000 tons of cargo and drawing 30 feet of water.

In addition to the quays along the banks of the river itself, there are four tidal basins, namely, Kingston, Queens, Princes, and Rothesay Docks. The quays are founded for the most part on concrete caissons sunk 60 feet below the level of the dock. The rise and fall of the tide is 12 feet. At low water the depth of the water is 24 feet.

Harbor Facilities—Commerce of the Port.

The wharves are well equipped with modern facilities for the rapid handling of cargo, and tramways connect them with the principal railroads of Scotland. The cranes, operated by hydraulic, steam, or electrical power, lift weights up to 150 tons. The trustees own three dry docks, and are about to construct at Renfrew another which will probably be the largest in the world. They also own several powerful dredges and a large fleet of hopper barges, the repairs to which are made in the trustees' workshop. Among the numerous ferryboats there are three for vehicles, which are conveyed across the river on platforms always maintained at the level of the quay according to the tides.

Such port facilities have naturally occasioned vast expenditures. During the past 100 years the authorities have spent almost \$50,000,000, but the debt outstanding is only about \$35,000,000, the balance having been paid out of the revenue of the port. To provide for future additions to docks, the trustees have taken title to 400 acres of land having a frontage of about 2 miles along the river. The quays of the port, which 50 years ago were $2\frac{1}{4}$ miles in length, are now 12 miles.

The commercial progress of the port of Glasgow is perhaps shown most clearly in the revenues of the trust and in the tonnage of the vessels and goods. Fifty years ago the annual revenue was \$476,900; in 1911 it was over \$2,807,970, the highest in the history of the port. The total tonnage of goods half a century ago was 1,000,000 tons, while now it is 12,000,000 tons. The total tonnage of vessels using the port then was only 3,000,000; at present it is more than 12,000,000. The principal articles dealt in at the port are: Exports—coal, iron, steel, and machinery; imports—grain, flour, fruits, timber, and

minerals. The total tonnage of the goods exported forms 60 per cent, and imported 40 per cent. The foreign traffic is 62 per cent of the whole, the rest being coastwise.

AN ENGINEERING SCHOOL IN TURKEY.

[Condensed report from the Levant Trade Review, Constantinople, published by the American Chamber of Commerce for the Levant.]

Robert College, the American institute of learning in Constantinople, has added an engineering department, under the direction of John R. Allen, M. E., from the United States. Prof. Allen states that the course will be strong along mechanical and electrical lines, with options in civil engineering, such as surveying, steel structures, railroad construction, water-power development, and irrigation. The new engineering building is now being constructed, the first wing being four stories high and 55 by 115 feet. The forge shop will have down-draft forges, blown by an electric fan, and a cut-off shear and punch. The second floor will contain the foundry. The cupola for melting iron will be in the court and have a spout entering the foundry room. The foundry will be arranged for both floor and bench molding and equipped for making brass castings as well as iron. On the third floor will be the machine shop, with an engine lathe, a gap lathe, speed lathe, drill press, large planer shaper, and Brown & Sharpe universal milling machine, including all necessary tools and attachments, each group of these tools driven by a separate electric motor.

The power will be obtained from a central power house. The boiler house is being constructed and will contain two 150-horsepower boilers, with room for a third boiler to be installed later. These boilers will furnish the steam for the electric-lighting engines and for the heating system.

The east wing of the engineering building will be the same size as the west or shop wing. This wing will contain the power plant, experimental steam, electric and hydraulic laboratories and the drawing rooms. The first floor will be used for the power plant, consisting of one 75-kilowatt 60-cycle 3-phase 220-volt alternating current, driven by a 4-valve engine, and one 25-kilowatt generator, driven by a single-valve high-speed engine. This machinery will be available for instructing the student in the operation and testing of a power house. On this same floor will be the larger gas engines and the hydraulic laboratory. In the basement will be the feed pumps and condensing apparatus. The second floor forms a gallery for the first floor. The smaller gas and gasoline engines, the experimental electric motors and generators and all work of calibration will be done on this gallery. The third floor will be devoted to calibration of instruments, computing rooms, special laboratories, and offices. The top floor will be used for drawing rooms, lecture rooms, museum, library, and recitation rooms. This building will be built as soon as the growth of the department makes it necessary.

In addition to the strictly engineering work it is proposed to establish classes in manual training for the younger boys. This will stimulate the interest in mechanics among the younger boys, besides giving them some knowledge of the processes of manufacture.

The woodworking and pattern department on the fourth floor will be equipped with a planer, a surfacer, a rip and crosscut saw, band saw, two speed lathes, a universal trimmer, and a molding and mortising machine. Each machine will be driven by its own direct motor.

NEW GOVERNMENT PUBLICATION.

Senate document 338, which contains the "Report of the Employers' Liability and Workman's Compensation Commission," is for sale by the Superintendent of Documents, Government Printing Office, Washington, D. C., in two volumes. Volume 1 consists of 214 pages, and contains the message of President Taft and report of commission with index analysis; price, 15 cents. Volume 2, 1,495 pages, contains hearings and briefs with tables of cases and general index; price \$1 (and not 15 cents as stated in Daily Consular and Trade Reports for May 13).

The new Chilean dreadnought Santiago, of 27,000 tons, has been ordered from shipyards at Elswick, Newcastle; it will carry 14-inch guns.

ICE SKATING RINKS IN GREAT BRITAIN.

[From Consul General John L. Griffiths, London.]

The first ice skating rink in Great Britain was opened at Southport in 1875. The same system was used then as obtains now for the manufacture of the ice. However, the expense was considerably greater, and, as a result, the rink was closed in 1877.

There have been three such rinks in London, Hengler's, opened in 1894 and closed in 1899; the Niagara, also opened in 1894, and closed in 1899 or 1900; and Prince's. The rinks now in operation are, in order of date of opening: Prince's, in London, opened 1895; a rink in Glasgow, opened 1906; one in Manchester, opened 1910; and one in Edinburgh, opened 1912. The London rink is run by a private club, while all the others have been and are managed by companies.

The membership dues of Prince's are calculated so that there may be a sufficient income to defray operating expenses. The following is a schedule of the fees and subscriptions of members:

	Full season.	Half season.
Men.....	\$61.32	\$35.76
Ladies.....	51.30	30.66
Two members of one family living in the same house..... each..	40.87	30.66
If more than two members, each additional member.....	35.76	25.54
Nonskating members.....	25.54	15.33

A monthly skating membership costs \$15.33. The skating season lasts from October to April, while the half season under the above schedule is considered to be from October to January 20, or from January 20 to April. The rinks in Glasgow, Manchester, and Edinburgh, operate approximately during the same months. There has been no movement as yet to keep the rinks open for skating during the summer months, so that the problem of insulating the ice against heat does not arise.

FRENCH CAMPAIGN AGAINST AMERICAN SHOOKS.

[From Deputy Consul General Bartley F. Yost, Paris.]

The Chambre Syndicale de l'Emballage, an organization of French box makers and packers, and the Chambre Syndicale de Bois de Sciage et Industrie (Saw and Industrial Wood Union) are conducting a vigorous campaign against the admission of shooks of American origin which arrive in a knocked-down state, with a view to securing legislation imposing an increased duty on all American cases landed in France and destined for return to the United States filled with French merchandise.

There are said to be 16 American exporting firms in Paris who use American shooks more or less regularly.

[American official records show the following exports of shooks and staves from the United States to France during the last five fiscal years (ending June 30): 1907, \$1,857,538; 1908, \$1,994,182; 1909, \$1,670,924; 1910, \$1,324,874; 1911, \$1,125,334.—B. of M.]

The results of weathering and spontaneous heating of coal experiments conducted by the Bureau of Mines are reviewed in its forthcoming annual report.

OCEAN FREIGHT RATES FIRM.

[From Consul General E. D. Winslow, Copenhagen, Denmark.]

Rates for cargoes keep very firm the world over; business is brisk, and tonnage is in demand. For April-May loading charters have been made from Bombay to the United Kingdom at \$6.69 up to \$6.87 per ton, with option to Hamburg 12 cents extra, and to Havre or Dunkirk 24 cents extra. From Black Sea ports good prices prevail; from Odessa to Hamburg, \$3.28 to \$3.40.

Mediterranean ports are paying especially good rates for prompt shipment, while offerings of tonnage are light. Grecian tonnage has paid \$2.07 to Rotterdam and \$2.80 to America. There have been some salt charters to British North America at \$2.55 to \$2.68. Rates from Huelva to America are quoted at \$2.80 to \$2.85 per ton. Plate River rates are also good, and prompt tonnage from the "Bar" Buenos Aires commands \$6.45 to \$6.57 for the United Kingdom.

The American freight market shows the quietest condition of all the centers. Some inquiry has been felt for coal cargoes, but rates are quoted as merely steady. The freight rates being paid for coal tonnage from the Welsh coal fields are as follows: To west Italian ports, \$1.82 to \$1.95; Port Said, \$1.82; Venice, \$1.95; La Plata, \$3.53 to \$3.65; Montevideo, \$3.40 per ton.

NEW BRITISH MOTOR VESSELS.

Several motor vessels of new types have just been launched from Scottish shipyards. A triple-screw tunnel motor ship, floated at Troon, is intended for the service of the British consul in the Kongo. The vessel is 110 feet in length and draws only 3 feet of water when loaded. It will be propelled by three sets of Kromhout paraffin motors, driving screws in three separate tunnels, and designed to give a speed of almost 10 knots. It is claimed that it is the first triple-screw tunnel vessel yet built for propulsion by motors.

A motor barge for service on the Forth and Clyde Canal has been launched at Grangemouth. It also will have Kromhout engines. Another interesting motor vessel is a twin-screw launch of 55 tons, which was floated at Whiteinch, for missionary work at Calabar in connection with the United Free Church of Scotland. This vessel has Kelvin motors of 60 brake horsepower, designed to give a speed of nearly 10 miles an hour.

Spring and Tire Inventions.

Consul General James A. Smith, of Genoa, has transmitted descriptions and blue prints of a recent Italian invention covering (1) a spring axle for heavy motor trucks and omnibuses; and (2) elastic plates for use on lighter motor vehicles. The first is intended to do away with the costly solid tires on heavy vehicles; the second, to replace pneumatic tires on lighter cars. The documents mentioned will be loaned to interested firms by the Bureau of Manufactures.

The Korean Young Men's Christian Association has established a shoemaking department in its industrial school at Seoul, and Consul General George H. Scidmore suggests that those interested correspond with its secretary, P. L. Gillett.

INTERNATIONAL COMMERCIAL CONGRESS AT BOSTON.

Supplementing the information relative to the sessions of the Fifth International Congress of Chambers of Commerce which appeared in Daily Consular and Trade Reports on March 19, 1912, the chairman of the Boston executive committee states that Prof. F. W. Taussig, of Harvard University, an authority on economics, has been appointed chairman of the American committee on program that is drawing up the list of commercial topics of international importance which the business men of the United States will submit for discussion at the congress. The final program of the congress (which meets in Boston Sept. 24 to 28) will be settled by the permanent committee after receiving suggestions from all countries. The meeting of this committee will be held at Brussels during the latter part of June. Prof. Taussig will attend as American representative.

For the convenience of delegates coming from other countries, the Boston Chamber of Commerce has arranged for special steamer transportation to that city. One hundred berths have been reserved on the *St. Louis*, sailing from Southampton and Cherbourg September 14, and 25 berths on the *Kroonland*, sailing from Antwerp and Dover on the same date.

POSSIBILITIES OF INDIAN COTTON CROP.

In a preliminary report on his recent (second) journey to India to further investigate the possibilities of cotton growing in that country Mr. Arno Schmidt, of Manchester, England, the secretary of the International Cotton Federation, states that the cotton crop of India this year will be smaller than last, which is due to prolonged drought in the western districts, but reliable statistical information as to the crop is not obtainable.

There is not the least doubt, Mr. Schmidt adds, that the cotton crop of India can be doubled without interfering with the growing of food supplies. This is the opinion of several experts, and notably of the imperial cotton specialist of India. In his opinion the yield per acre has already increased, and is gradually improving. The extension of irrigation in several Provinces, which is making rapid progress, is another means of enlarging the area under cotton, and notably of long staple cotton.

Agricultural Progress in India.

Sir John Hewett, in his address at Lucknow, India, on March 30, to the United Provinces Legislative Council, stated that the interest elicited in the agricultural court of the Allahabad Exhibition [described in the Daily Consular and Trade Reports for Nov. 5, 1910], is the most encouraging sign that has been met with in the endeavor to introduce modern agricultural machinery. The progress in the substitution of improved implements of agriculture has been slow, but the officer learns that the attitude of the upper and middle classes toward improvement is substantially changed. This influence through the landlord is considered most hopeful.

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INDUSTRIAL PROGRESS OF MANITOBA.

[By Consul General John E. Jones, Winnipeg.]

While western Canada showed marked progress during 1911, business conditions, which gave great promise at the beginning of the year, proved disappointing. The grain crop was the largest ever gathered in the Canadian West, but it was not as favorable as had been hoped for, and its value was considerably reduced by early frosts, which damaged the oat crop particularly. Much grain was also spoiled by heavy rains during the harvest period.

Grain Movement a Growing Problem.

After bending all their energies to supplying the West with coal, because of the great strike of the miners in western Canada, the railroads found themselves unable to handle the grain crop in the short time allotted, although the amount of grain moved in the time allowed exceeded that of any previous year. A serious blockade occurred and all the elevators at Fort William, Port Arthur, and throughout western Canada were soon filled. Being unable to move the grain to eastern Canadian points for export, the farmers sought relief by shipping it through the United States.

The prairie Provinces devote all their cultivated area to grain, and while only 7 per cent of their arable land is under cultivation, the question of the profitable disposal of the annually increasing yield is challenging the serious thought of Canada's greatest economists. When western Canada produces 600,000,000 bushels of wheat, as is predicted for 1915, the condition will be serious. The population of this region is increasing more rapidly than the railroad development, and if immigration continues at even the rate of the past few years the railroad facilities will be inadequate to handle the enormous crop.

With the restricted market to the south, the Canadian farmer now finds Europe the only practical outlet for his wheat. Some expect that upon the completion of the Hudson Bay Railroad a large part of the export grain will find its way to Europe through Hudson Bay, but from careful consideration of the subject it appears that the western crop will be divided, a large part going to Europe from

western ports through the Panama Canal, while the rest will go east to Montreal and other Atlantic ports.

Shipments of Grain.

The Lake Shippers' Clearance Association reports that 61,365,722 bushels of grain were transported through the ports of Fort William and Port Arthur, as compared with 47,389,682 bushels in 1910. The number of vessels loaded in 1910 was 429 and in 1911, 491. There were 101 grades of wheat, 25 grades of oats, 10 grades of barley, and 4 grades of flax handled, and the 1911 shipments were made up of 47,633,639 bushels of wheat, 11,518,982 bushels of oats, 1,403,835 bushels of barley, and 809,266 bushels of flax. Of these amounts, the consignments to ports of the United States were as follows: Wheat, 24,777,025 bushels; oats, 774,566 bushels; barley, 784,771 bushels; and flax, 506,705 bushels. Over 100,000,000 bushels of wheat were inspected at Winnipeg in 1911.

The total shipments of grain by vessel during the 1910-11 season amounted to 77,209,808 bushels and the rail shipments to 4,855,821 bushels.

The following table shows the grain production in the three prairie Provinces in 1911:

Grain.	Manitoba.	Saskatchewan.	Alberta.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
Winter wheat.....	85,000	758,000	8,011,000
Spring wheat.....	60,190,000	96,907,000	28,132,000
Oats.....	57,993,000	97,962,000	56,964,000
Barley.....	14,447,000	5,445,000	4,151,000
Flax.....	1,123,000	10,688,000	973,000

Alberta has no competition in the growing of winter wheat, although this grain has been successfully grown on a small scale in the other Provinces. Manitoba leads in the production of barley and Saskatchewan in spring wheat, oats, and flax.

Immigration.

Of the 351,000 immigrants who entered Canada during 1911, 180,000 came from the United Kingdom, 130,000 from the United States, and the rest from Europe, principally from Belgium and Austria-Hungary. The quality of the immigrants has continued to improve, not only in the physique of the new settlers, but in their worldly possessions. It is estimated that the immigrants from the United States last year brought with them cash, securities, stock, implements, and household effects to the value of \$135,000,000.

The immigrants from the United States have settled chiefly in western Saskatchewan and in central and southern Alberta, at least 80 per cent having settled in the latter Province. New areas, extending 250 miles north from the boundary line, have been opened for homestead and preemption, and the outlook for immigration is regarded by competent authorities as most satisfactory. Present indications show that the high-water mark of European immigration attained in 1911 is certain to be exceeded in 1912, while the reports received from the Canadian Government agencies in the United States indicate an increase of American immigration in 1912 of nearly 30 per cent over 1911. The immigration from the United

States in October, November, and December, 1911, showed a gain of 25 per cent over the same period in 1910.

Area of the Prairie Provinces.

The area of the Provinces of Manitoba, Saskatchewan, and Alberta is estimated at 334,894,320 acres, of which 153,797,984 acres have been surveyed. In the three Provinces there are no less than 3,260,509 acres of land reserved for road allowance purposes. There are 486,311 acres of parishes and river-lot settlements in Manitoba, 81,974 acres in Saskatchewan, and 96,603 acres in Alberta. The area of forest reserve is gradually increasing and is now computed at 3,277,562 acres, there being 2,452,960 acres in Manitoba, 599,642 acres in Saskatchewan, and 224,960 acres in Alberta. The pressing need of reservation in Manitoba is responsible for the greater amount in that Province. These figures do not include the Rocky Mountain Reserve of 11,656,320 acres.

The area of Indian reserves is estimated at 2,729,558 acres and the total area under homestead, preemption, and purchased homestead entry in the three Provinces is at least 55,611,520 acres. These latter are chiefly even-numbered sections. The railway companies have been granted 31,864,047 acres, chiefly in odd-numbered sections, in these Provinces. The total area of school lands endowment, exclusive of unsurveyed lands, is 7,963,254 acres. The Hudson's Bay Co. holds grants of 6,575,400 acres and the area otherwise disposed of, including northwest half-breed scrip, military scrip, Manitoba swamp lands, and sales and irrigation lands, amounts to 11,952,853 acres.

The total area of this land under cultivation in 1910 was 13,823,900 acres, of which 7,960,400 acres was devoted to wheat. In 1911, the area under cultivation in Manitoba was 5,318,989 acres, in Saskatchewan 7,436,560 acres, and in Alberta 1,808,719 acres. The Canadian census bureau estimated the population of Manitoba as 540,121, of Saskatchewan as 425,927, and of Alberta as 373,113, on March 31, 1912.

A large part of the remaining unsurveyed land has as yet been only partially explored, but from what is now known of its character the area available for some form of agricultural work is estimated as 10,000,000 acres in Manitoba, 18,000,000 acres in Saskatchewan, and 60,000,000 acres in Alberta. With the addition of 10,000,000 acres to be added to Manitoba, the total reaches 98,000,000 acres. Allowing for the inferior quality of this unsurveyed area, this should represent an area of farming land fairly equal in productiveness to the present settled area.

The total area set apart as endowment in the three Provinces by the Dominion lands act amounts to 23,629,387 acres, of which 7,963,254 acres have been surveyed. Of this 1,633,955 acres have been sold, at an average price of \$11.47 per acre. Saskatchewan received the highest average price per acre, with Alberta second.

Growth of Railroads and Banks.

During 1911 something like 800 miles of new railroad were opened and operated in the Provinces of Saskatchewan and Alberta alone, and the estimates made by the three railroad companies engaged in constructing branch lines indicate that the mileage constructed dur-

ing 1912 will be as great or greater. Vast tracts of new land, stretching 200 miles north from the boundary line into Alberta and Saskatchewan, will be penetrated by railroad lines this year, accommodating the thousands of American homesteaders who have settled there.

The railway mileage in Manitoba rose from 1,470 miles in 1893 to 3,526 miles in 1910; in Saskatchewan from 748 miles to 3,350; and in Alberta from 807 miles to 1,774 miles in the same period. The mileage at the end of 1910 was divided among the different companies as follows:

Companies.	Manitoba.	Saskatchewan.	Alberta.
	<i>Miles.</i>	<i>Miles.</i>	<i>Miles.</i>
Canadian Pacific.....	1,529	1,750	1,270
Canadian Northern.....	1,531	1,183	219
Grand Trunk Pacific.....	304	417	285
Great Northern.....	162		

The number of banks in these three Provinces has greatly increased since 1911, the number in Winnipeg having risen from 14 in 1901 to 43 in 1911; in Regina, from 2 to 10; in Calgary, from 4 to 18; in Edmonton, from 2 to 16; in Medicine Hat, from 1 to 4; and in Saskatoon, from none to 12. In the same period the number of banks in Montreal rose from 38 to 81, and in Toronto from 40 to 140. The bank clearings of Winnipeg in 1911 amounted to \$1,170,000,000.

Manitoba's Merchant Marine.

Although a number of vessels have been employed for many years in transporting fish and wheat from Lake Winnipeg and the Red River, it was only with the completion of the locks at St. Andrews, 18 miles from Winnipeg, that Manitoba's merchant marine assumed importance. At present 37 registered craft, of 5,069 gross tons, are engaged in this traffic.

In 1911, 347 vessels, of 109,344 gross tons, passed through the St. Andrews locks, as compared with 179 in 1910. They carried 5,350 passengers, 513 tons of merchandise, 1,748 tons of lumber, 3,345 tons of cordwood, 14,659 tons of sand, 18,000 tons of stone, and 194 tons of coal. The tonnage passing through the locks in 1911 was valued at \$123,980, including raw products to the value of \$72,255 shipped from the lake to the Winnipeg market. One shipment of 7 tons of butter, valued at \$1,750, came down from the new settlements northwest of Gimli shortly after the opening of navigation. The total outgoing commercial traffic of Lake Winnipeg during 1911 is estimated at \$765,255.

The navigation of the Red River officially closed October 15, and the locks of St. Andrews were put out of commission for the winter. Lake Winnipeg is usually frozen over by November 15, and in 1911 13 large ships were caught in the ice. A request to the Government for an ice breaker for the lake brought a promise of relief. In order to lose as little time as possible, the fishermen are not sent to their camps until late in the fall, which keeps navigation late. It is estimated that the commercial traffic along the river and lake in 1911 was nearly 50 per cent greater than that of any previous year, and all of this increase is attributed to the use of the locks at St. Andrews and the use of the Red River. The need of the traffic now is the

improvement of the Red River at Winnipeg by dredging and the erection of docks. The Government has five dredges on the Red River and Lake Winnipeg service, and work has been done at various points.

Mixed Farming Needed in Western Canada.

Western Canada presents the peculiar anomaly of a wonderfully productive agricultural country importing most of its food products. Although the prairie Provinces have a most productive soil, capable of producing nearly all kinds of farm produce, they have not been able, for the past 10 years, to supply the demands of their population, as the single purpose of the western Canadian farmer seems to be to produce as much wheat as possible. Strenuous efforts were made during 1911 to awaken the farmers to the value of mixed farming, and these have not yet proved successful.

No statistics are available showing the enormous importation of foodstuffs from the United States and eastern Canadian points, but most of the poultry and eggs used in western Canada come from the eastern Provinces and the United States, and the larger cities of western Canada yearly face a dearth of dairy products. During 1911, the milk shortage in this region became so acute that the border States of the United States were called on to supply the deficiency. It is estimated that the imports of milk for Winnipeg during November, December, January, and February averaged \$45,000 a week in value. The United States was also called upon to supply potatoes; although these are the most productive crop in western Canada, they were not raised in sufficient quantities to meet the demand.

With a population of 1,700,000, according to the last census, it can be readily seen from the figures following that western Canada is not producing enough vegetables, dairy products, etc., to supply its immediate needs. It is dependent upon outsiders for millions of pounds of bacon and mutton, and for weeks at a time the Winnipeg market has been supplied almost entirely with chilled mutton from Australia or frozen mutton from Prince Edward Island.

During 1911 the Provinces of Manitoba, Saskatchewan, and Alberta produced 11,141,207 pounds of butter, valued at \$2,573,671, and 660,725 pounds of cheese, valued at \$84,691, as compared with 10,066,759 pounds of butter and 1,121,258 pounds of cheese in 1910.

The quantity and estimated value of the crops of potatoes, hay, etc., in the Provinces of Manitoba, Saskatchewan, and Alberta for 1910 and 1911 are shown in the following table:

Crops.	Quantity.		Value.	
	1910	1911	1910	1911
Potatoes.....bushels..	7,781,000	14,044,000	\$4,743,000	\$6,303,000
Turnips, etc.....do....	1,850,000	8,247,000	826,000	2,931,000
Hay and clover.....tons..	215,000	539,000	2,429,000	5,892,000
Sugar beets ¹.....do....	25,000	15,000	125,000	75,000

¹ Alberta only.

Live Stock Shipments.

While western Canada has been able to meet in a small way the demands of its people for beef, the disappearance of the great cattle ranges will soon force the importation of beef. A large amount of

mutton and pork products are imported each year from the United States and England and from the eastern Provinces and Prince Edward Island. Alberta did better during 1911 in its shipments of cattle, and at a meeting of the live-stock shippers and railway representatives at Winnipeg in December the Alberta delegates showed that at least 30,000 head of cattle were shipped to British Columbia during the year. The loss of the export trade was largely offset by the rapid development of the home market, and Alberta found more profit in shipping cattle to the Pacific coast than to the Atlantic ports.

The steady decline in the number of hogs received at Winnipeg from 145,269 in 1908 to 85,157 in 1911 is most unsatisfactory, in view of the fact that the Winnipeg packing houses have never received enough animals to employ their full capacity. The price for the year, while below that of 1910, was profitable, averaging \$7.71 per 100 pounds. The highest price, \$8.80, was paid in September, and the lowest, \$6.85, in May.

The receipts of sheep increased from 30,775 in 1910 to 43,614 in 1911, but there was no increase from western Canada, as the additional sheep were brought from St. Paul and Minneapolis. The price averaged \$4.89 for the season.

The shipments of horses into Winnipeg for western points amounted to 26,072 head, a decrease of 7,499 from 1910, the record year. While western Canada has been breeding horses for some time, the industry has become extensive only within the past five years. As it requires four years to produce salable horses for farm or railway work, the first shipment of marketable western horses was ready in the spring of 1911. It is impossible to furnish accurate figures as to the importation of horses, but thousands are brought from the United States each year to work on Canadian farms.

Production of Flour—General Exports to the United States.

It is impossible to obtain complete returns as to the amount of flour manufactured from western wheat and shipped abroad, but 1,436,802 barrels of flour were exported directly from the West to foreign countries, as against 3,228,500 barrels in 1910. Of this amount, 24,470 barrels were shipped to China, 2,620 barrels to Japan, and 500 barrels to Fiji, these being sent by way of Pacific ports. About equal amounts of the balance were shipped to the United Kingdom and the Continent, the latter proving a fair market for low-grade flour. The falling off in the export trade has been largely offset by the increased domestic consumption. Over 1,250,000 barrels of flour were manufactured by interior mills for local consumption. Several of the larger mills report heavy sales of mill stuffs to the United States, Germany, Holland, and Denmark, the principal articles sold being bran. Denmark continues to buy bran from western Canada to feed her dairy cows and ship butter in return to Montreal and even to Winnipeg, while the western farmer continues to assure the public that it does not pay him to feed bran to his cows, even when the retail price of butter is 40 cents a pound.

Practically no barley was exported from this consular district in 1910, but the high prices prevailing in the United States during the latter part of 1911 permitted the Canadian shippers to realize a good profit after the payment of duty and freight and resulted in the ship-

ment of barley to the value of \$315,056. Nearly all other grains and their manufactures showed material decreases during 1911. The scarcity of beef cattle in western Canada during the early part of 1911 caused a decrease in the exports of hides during that period, which was overcome by a great increase during the fall, giving a net increase over the preceding year of \$221,440. Notwithstanding the great quantity of fish exported in 1910, the exports of fish in 1911 showed an increase of \$111,594. Material increases were also noted in pulp wood and butter. The butter shipped from this district is, as a rule, of inferior quality, and is shipped to the United States to be worked over and then exported. The exports of furs declined \$252,576 in 1911, owing to the large amount of furs exported during the previous year and also to the disturbed condition of the European fur markets.

Declared Exports.

The values of the principal exports to the United States, as invoiced at this consulate general and its consular agencies during 1910 and 1911, were as follows:

Articles.	1910	1911	Articles.	1910	1911
WINNIPEG.			PORT WILLIAM.		
Animals:			Breadstuffs:		
Cattle.....	\$16,288	\$12,151	Barley.....		\$377,483
Dogs.....		1,268	Bran.....	\$354,055	6,000
Horses.....	36,234	6,096	Buckwheat.....		990
Race horses and out- fits.....		4,779	Flour.....	83,522	20,231
Bones.....	14,208	10,398	Oats.....	164,898	112,525
Breadstuffs:			Screenings.....	174,528	115,935
Barley.....		315,056	Wheat.....	106,120	1,229,700
Bran.....	105,152	36,594	Fish.....	5,567	8,039
Flour.....	359,328	220,646	Flax.....	6,577,712	1,738,281
Oat hulls.....	21,485	12,684	Furs.....		2,955
Oats.....	40,291	18,709	Pebbles, flint.....		17,160
Screenings, wheat.....	5,035	2,042	Pyrites.....		89,280
Wheat.....		2,042	Wood, and manufactures of:		
Butter.....	39,429	57,095	Furniture.....	6,880	5,210
Fertilizer.....	11,676	6,701	Pulp wood.....		175,288
Fish.....	450,211	561,805	All other articles.....		4,219
Flax.....	187,970	121,637	Returned American goods.....	103,284	52,808
Furs.....	680,177	427,601	Total.....	7,576,506	3,956,104
Hides.....	991,122	1,212,562	KENORA.		
Household and emigrants' effects.....	117,837	122,657	Breadstuffs:		
Junk.....	41,177	34,419	Bran.....	55,372	113,481
Lye.....	12,424	19,620	Flour.....	102,822	234,074
Rubber, scrap.....	13,035	15,908	Shorts.....	14,485	6,107
Seneca root.....	76,547	73,290	Fish.....	35,552	35,820
Wood, and manufactures of:			Wood, and manufactures of:		
Lath.....	9,669	3,273	Laths.....	17,600	14,450
Logs.....	27,591	3,720	Lumber.....	10,970	4,722
Lumber.....	37,795	54,793	Timber.....		
Poles.....	2,302		All other articles.....	7,863	4,096
Pulp wood.....	15,596	66,862	Returned American goods.....		3,953
All other articles.....	27,748	76,485	Total.....	307,086	417,303
Returned American goods.....	521,070	453,403			
Total.....	3,862,597	3,958,897			

Growth of Western Canadian Cities.

The real estate men of western Canada are considering plans for the control of real estate speculation, as subdivisions which can not possibly materialize into building centers are being put on the market and extensively advertised. Such speculation acts as a drawback to western Canada. Calgary, Alberta, leads the cities of

the prairie Provinces in the amount of money spent for building, while Moose Jaw, Saskatchewan, showed the highest percentage of increase. Although 1910 was a year of great building activity in Winnipeg, 1911 showed an advance of \$2,500,000. The following table gives the assessment valuations and building expenditures of 11 of the leading cities of western Canada during 1910 and 1911:

Towns.	Assessment valuation.		Building expenditures.	
	1910	1911	1910	1911
Brandon.....	\$9,573,740	\$12,415,310	\$1,224,385	\$1,108,229
Calgary.....	30,796,092	52,747,600	5,589,594	12,709,478
Edmonton.....	30,105,110	46,494,740	2,161,356	3,797,526
Lethbridge.....	9,603,365	11,908,555	1,211,310	1,033,980
Medicine Hat.....	4,134,094	.....	277,140	450,000
Moose Jaw.....	15,090,383	20,006,099	1,071,090	2,475,738
Portage la Prairie.....	4,895,133	5,300,388	362,500	300,000
Prince Albert.....	6,018,687	10,362,532	662,475	921,145
Regina.....	18,211,960	34,840,733	2,416,288	5,068,110
Saskatoon.....	10,571,215	23,392,528	2,817,771	4,920,000
Winnipeg.....	157,608,220	172,677,250	15,116,450	17,600,000

In 1911 Calgary had 20,000 miles of pavement, Edmonton 6,270, Moose Jaw 1,700, Regina 13,500, St. Boniface 16,060, and Winnipeg 144,540.

Municipal Ownership in Winnipeg.

Early in its development Winnipeg took up the practice of owning its public-utilities plants and now claims to have made the longest strides along the line of municipal ownership of any city in the New World. The city has grown from a population of 215 in 1870 to 135,000 in 1911.

The greatest municipal enterprise of the city is its power plant, which commenced the supplying of electric current for light, heat, and power in the latter part of 1911. This plant is located at Point du Bois, on the Winnipeg River, 77 miles northeast of Winnipeg, and cost about \$4,000,000. A water fall of 32 feet has been increased to 47 feet by the power development dam, which retains a reservoir of 6,000 acres. The total horsepower available without storage is 60,000, which can be increased to 100,000 horsepower. The opening of this plant gave a great impetus to the industries of Winnipeg, which have increased their output from \$18,983,290 in 1906 to \$36,000,000 in 1910.

A supply of nearly 15,000,000 gallons of excellent water every 24 hours is obtained by the municipal plant from seven artesian wells. There are indications that a larger supply will soon be needed, and the possibilities of obtaining a permanent and sufficient supply from some of the lakes about 60 miles from the city, or from the Winnipeg River, are being investigated. City water is sold at the rate of \$1.50 per quarter for four rooms, with a 30-cent increase for each additional room, and a 5 per cent discount for prompt payment. A high-pressure plant for fire protection furnishes water from the Red River under 300 pounds pressure, with a special set of pipes laid in the business center of the city.

The city owns an asphalt plant, a stone quarry, and a plant for laying granolithic walks. Winnipeg has paved 70 miles of its streets, of which the principal ones are nearly 150 feet wide, with asphalt. Under municipal ownership, heavy asphalt pavement is laid at a cost of \$2.85 a square yard. Other grades are laid for \$2.50 to \$2.85 a

yard. The city is about to adopt the asphalt-macadam type of pavement, which can be laid for 90 cents a square yard. There are 100 miles of granolithic walks in Winnipeg, all laid by city workmen and made largely of material from the municipal stone quarry, which has an annual output of about 75,000 cubic yards of crushed stone. In 1906 the city decided to establish a municipal gas works, but this has not yet been done.

The big event of the summer in Winnipeg is the provincial exposition held for a week or more each July.

Future Prospects.

While Winnipeg still leads the western cities in point of influence, population, and wealth, it is believed that the next few years will show a difference in favor of Vancouver. Winnipeg's claim to consideration lies in the fact that it is the center for five railroads and numerous branches, which radiate into all parts of the western country. It is really the clearing house for western Canada; but gradually, as the population of the West increases, some other city or cities must take its place. It is generally predicted that, with the completion of the Panama Canal, Vancouver will be the great city of western Canada, for there is little doubt that the West will attract a largely increased amount of trade to its shores with the opening of this great waterway.

Winnipeg advances as the grain crop increases, and while the farmers of western Canada had serious obstacles in every way in harvesting their 1911 crop, Winnipeg did not feel the financial situation that was generally expected. To-day, however, the great implement dealers who supply machinery for the western farmers are carrying millions of dollars in promissory notes. Collections during the year, while they promised well, fell off greatly as the season advanced and crop conditions became worse.

Great efforts are being made by those interested in the city's welfare to make Winnipeg a manufacturing center, and at the close of 1911 Winnipeg had 267 manufacturing establishments, with an invested capital approximating \$35,000,000, employing upward of 15,000 hands, with a monthly pay roll of \$750,000. The estimated output of Winnipeg's industries in 1911 was \$40,000,000.

NOTES FROM SOUTH AFRICA.

[From Consul E. A. Wakefield, Port Elizabeth, Cape Province, Apr. 15.]

Ostrich feathers.—The market for ostrich feathers has shown decided improvement during the last few weeks, especially for the better grades. One week's sales early in December, of 6,183 pounds, brought \$55,500; one in February, of 6,128 pounds, brought \$76,400. In the first week of April, 9,483 pounds were sold for \$100,000. The market is firm and competition keen, with every prospect of a successful season.

Wool.—Catalogue wool sales for the first week in April comprised 3,653 bales, which were as usual offered at public auction. Only 1,002 bales were sold at moderate prices. Really good lots only were in fair demand with prices unchanged from the previous week's sales. A large proportion of the offerings consisted of very wasty long wools and short faulty wools for which there was little demand, with the result that most of them were withdrawn.

EXHIBITIONS AND FAIRS.

[From Consul General Henry H. Morgan, Barcelona, Spain.]

An International Food and Hygiene Exposition.

The following letter from the director of the proposed Exposition of Food, Hygiene, and Various Products, to be held at Tibidabo, Barcelona, invites participation by American manufacturers:

We have the honor to inform you that under the patronage and with the collaboration of the Society El Tibidabo an Exposition of Food, Hygiene, and Various Products will take place at Barcelona from May 25 to June 25, 1912. This exposition, at which the merchants and business men of all countries may take part, will be installed in the rooms of the Tibidabo, specially arranged for the purpose. We have sent invitations to a certain number of business men of the United States and those of them who are willing to accept the invitation to exhibit their products there will be particularly well received.

[From Consul Augustus E. Ingram, Bradford, England.]

Otley Agricultural Show—English Plans for Restrictive Exhibits.

The Wharfedale Agricultural Society held its one hundred and fourteenth annual show at Otley (10 miles from Bradford) on May 3 and 4 last. The Otley show is always the first show of the north country season, and for that reason is largely attended, as there may be seen the stock likely to attain distinction elsewhere in the country during the year.

The total number of entries this year was 3,507, as compared with 2,942 last year. The cattle, which included some notable shorthorns, numbered 162. The horses, draft and agricultural, hackneys, hunters, and ponies, numbered 330, and among the hackneys some particularly fine specimens were shown, as in the district there are stud farms of national reputation. With the exception of pigs, which were not exhibited, owing to the stringent swine-fever regulations, all other classes of animals were well represented, especially dogs, the breeding of which receives so much attention in the north of England.

The Yorkshire show season this year will be more important than usual, owing to the Royal Show being held at Doncaster in July, when the King will be present.

In this connection it is of interest to note that a movement is being made in Yorkshire to request the Royal Agricultural Society of England to decline to admit to its shows cattle which have not been subjected to the tuberculin test and found to be free from tuberculosis. The object is to prevent the possible infection of sound animals by unhealthy stock.

This year's show of the Royal Agricultural Society of England will be held at Doncaster, England, July 2 to 6. The stock prizes committee has received notice from the Canadian Industrial Exhibition Association that it desires to offer at the show a silver medal for the best Dorset horn sheep. The implements committee reports the number of stands engaged as 443.

[From Consul J. C. McCunn, Glasgow.]

Smoke Abatement Exhibition in Scotland.

A Smoke Abatement Exhibition will be held in Glasgow under the auspices of the Glasgow Corporation from September 20 to October 20, 1912.

This exhibition promises to be more interesting and important than the very successful similar one in 1910. As the corporation will make

a special appeal to manufacturers to install in their works appliances for the abolition of smoke, particular interest will center in the numerous exhibits of smokeless fuel and patent appliances, electrical and gas, for all domestic purposes, heating, cooking, laundry, window lighting, advertising and all kinds of specialties, fireless cookers, and, in fact, everything connected with light and power. This is an excellent opportunity for American manufacturers in any of these lines to exhibit and advertise in a market that promises to be very fruitful.

Manufacturers of the United States are advised that an enterprising firm here, now exploiting American lines, offers to exhibit for Americans at the coming show without charge beyond the actual expense incurred and will become cash purchasers for any lines that prove acceptable to the consumers here if a guaranty of exclusive control of territory is given. No time should be lost in getting in touch with this firm, the address of which is obtainable from the Bureau of Manufactures. It would be well that manufacturers who desire to exhibit should, in order to save time and correspondence, state in their first communication the list and net prices of their apparatus or machinery and gross weights. The price should include free delivery, Glasgow.

[Correspondence from Alexandria in the Near East.]

International Games in Egypt.

A huge stadium of iron and stone work has been constructed at Alexandria on a plat of land set aside for that purpose by the municipality. The Philaton Sporting Society has spent \$40,000 in building the stadium of 10,000 seats. The beginning of June will witness a series of sporting events, both athletic and gymnastic, in which Egyptian and Greek clubs will take part. The Greek cruiser *Averoff* and a flotilla of torpedo boats are expected from Athens in connection with the fêtes, and a number of visitors are to arrive from various towns and cities.

The Alexandria municipality has asked the International Olympic Committee to designate Alexandria for the Sixth Olympic Meeting, to be in 1916. Four have already been held—in Athens in 1896, in Paris in 1900, in St. Louis in 1904, and in London in 1908; the fifth is being held this summer in Stockholm.

AUSTRALIAN WOOL TRADE.

A Reuter dispatch from Melbourne states that the Victorian wool production for the past season amounted to 110,000,000 pounds, as compared with 101,803,000 pounds last season. The average weight of a sheep's fleece was 7.28 pounds, as compared with 6.99 pounds in the preceding year.

Dalgety & Co. have received the following advices from Melbourne: Exports of wool from July 1, 1911, to April 30 were: From Australia, 1,878,000 bales, an increase of 42,000 bales as compared with corresponding period of last season; from New Zealand, 430,000 bales, a decrease of 20,000 bales.

New Jamaican sugar central.—Consular Agent Harry M. Doubleday, of Montego Bay, reports the completion of a new sugar central 10 miles from that Jamaican port, and of a tramway from the factory to the wharf from which the sugar and rum will be brought to Montego Bay. The new central, which is owned by Scotch and Jamaican interests, has a capacity of 25 tons per day. The address of its manager may be obtained from the Bureau of Manufactures.

OCEAN SHIPPING LINES.

[From Consul General James A. Smith, Genoa, Italy.]

Steamship Line between Tripoli and the Adriatic.

The Commercial and Industrial Syndicate for Tripoli has instituted a direct line of steamships to ply between Venice and Tripoli. Ports of call will be Ancona, Barletta, Bari, Brindisi (other ports of Apulia, Italy, optional), Malta, and Tripoli. In order to encourage commerce and trade between the Adriatic ports of Italy and the port of Tripoli, samples not exceeding 50 kilos (110 pounds) in weight are to be carried free of charge. [The new Italian line between Sicily and Tripoli was noted in Daily Consular and Trade Reports for Apr. 6.]

London to East Africa.

The Union-Castle Line announces that, commencing with the departure of the *Guelph*, leaving London on May 16 and Southampton on May 17, the company's steamers inaugurate calls, outwards and homewards, at Porto Amelia (Portuguese East Africa) by the steamers engaged in their Royal East African service. Porto Amelia has a good harbor, and the establishment of these calls should assist developments affecting the Nyasaland Protectorate.

New Philippine Island Line.

The South Philippines Steamship Co., paid-up capital \$76,000, has been formed at Zamboango, Mindanao, and chartered by the Government to engage in coastwise trade. Several prominent capitalists of Moro Province are interested.

[Statement by the New York agents of Norway-Mexico Gulf Line.]

Norway-Mexican Gulf Line.

The Norway-Mexico Gulf Line has just issued its statement for 1911, showing gross earnings of \$470,000. After paying a dividend of 5 per cent upon the capital invested, interest on builders' loans, and all charges and expenses, a net surplus of \$36,000 is carried forward to the depreciation fund, which now amounts to about \$44,500.

This line is subsidized by the Norwegian Government and operates the only direct line of freight and passenger steamers between Norwegian and Swedish ports and the United States, calling at Newport News, Va., and the Gulf ports. It owns three new steamers of about 6,000 tons capacity, with which it maintains a monthly service. The line is contemplating building a shelter-deck steamer of 6,000 tons for the Gulf service, and to eventually increase its fleet to six steamers, to ply in two divisions, one to the Gulf and the other to the North Atlantic ports.

The Prospective 18-inch Gun.

An English engineer in a paper dealing with "The manufacture and treatment of steel for guns," read before the Iron and Steel Institute, referred to the increase of size in modern ordnance and said that there were now rumors concerning a gun of 18-inch bore and weighing between 150 and 200 tons in succession to the 14-inch gun.

French wine production.—Consul Louis Goldschmidt, of Nantes, reports that the total value of the eight French wine crops from 1904 to 1911, inclusive, is officially estimated at 29,700,625 francs (\$5,732,221), giving an average value per crop of \$716,538, or \$467 per hectare (2.47 acres).

LACROSSE PLAYED IN ENGLAND.

[From Consul Church Howe, Manchester.]

The game of lacrosse is played more in Manchester and surrounding suburbs than in any other part of England. The game is practically confined to the north and south of England, with centers at Manchester and London, the season extending from September until the end of April.

The North of England Lacrosse Association, with headquarters in this city, is composed of some 50 affiliated clubs, with an estimated membership roll of 2,000, more than half of whom are active playing members. Many local schools and colleges have taken up the game, and each year sees an increase in the proportionate playing strength of the clubs. The Yorkshire district is also being opened up to the game. Exhibition games are frequently held in the Lancashire towns, with a result that new clubs are frequently formed.

The lacrosses sold in the sports outfitters stores here are practically all of Canadian make, no American-made goods being noticed during an inspection of one of the leading stores. A concern of Cornwall, Canada, furnishes the major portion of the lacrosses used in the north of England. It seems to be the general practice of the Canadian makers to ship the lacrosses over here complete.

The sports depots carry stocks of sticks, principally for making lacrosses to players' own requirements and for repair work. I am informed that in most cases it is more profitable to purchase ready-made consignments than import the lacrosse sticks and have them strung here.

Present prices for lacrosses range as follows: Men's, \$3.65, \$3.28, \$3.04, and \$2.55; ladies', \$2.80; youths' size, \$2.55, \$2.07, \$1.58, and \$1.34; boys', 85 and 42 cents. Best Canadian men's sticks retail at \$1.09; ladies', 73 cents; and youths' about 40 cents.

American manufacturers of hardwood articles, such as lacrosse sticks, have neglected the English market. The opportunities for the introduction of these goods into this district are encouraging. [The addresses of Manchester sports outfitters which handle lacrosses and lacrosse sticks may be had from the Bureau of Manufactures.]

PAN AMERICAN RAILWAY CONNECTION.

[From Hugh R. Wilson, secretary American Legation, Guatemala City.]

With reference to connecting up the links in the Pan American Railway, the Guatemala Central Railway makes the following announcement, by which it appears that connection will be made with the Mexican Railways in June, 1913:

In the railway line which begins at Las Cruces and is to end at Ayutla, passing by Coatepeque on the Pan American route, there are 12 miles completely graded to a point called Santa Joaquina. The rails reach the river or ravine called Talpechos, where a viaduct 580 feet long is being placed. By the end of May the track will reach "mile fifteenth," only 5 miles from Coatepeque. The difficulties to be encountered in this part of the road will make it impossible to conclude this work before the end of this year.

The rest of the road to the Mexican frontier does not offer any difficulties. The part of the Pan American Railway pertaining to Guatemala on the western side is expected to be finished in June of next year; it will join at Ayutla with the Pan American Railway of Mexico. The section through which they are building has a good climate, not presenting the difficulties in regard to health for the laborers as the first miles did. The station of San Miguelito on the new line has already given good service during the last crop.

SIBERIAN FUR TRADE.

[From Consul General John H. Snodgrass, Moscow, Russia.]

The requirements of fashion were the cause of the greatest destruction in 1911 of wild animal life in the history of Siberia. The total returns of the fur trade in that country amounted to more than \$4,000,000, or over \$500,000 in advance of 1910.

There were 4,525,000 gray squirrels killed in the Siberian woods. The sales of the tails alone, used for boas and dress trimmings, amounted to 21 tons. The Siberian dealers made \$2,000,000 on this fur, which, because of the increased demand on the foreign markets, has gone up 15 to 20 per cent in price. The cheapest skin sold for 15 cents; the superior qualities 32 cents. The price for tails rose to \$5.50 per pound.

Next after the gray squirrel comes the white hare; 1,500,000 of these brought \$275,000. Of sables, 12,250 were killed. The most valuable dark sables were sold at an average price of \$200, but there were not many buyers for this fashionable luxury, and a much better sale was reached with the cheaper qualities. The total amount received for sables was about \$500,000.

No White Bear Skins—Other Furs.

Arctic fox was scarce. About 100 skins were offered, which were valued at \$100 and \$250 each. Ermine has again become fashionable, and 200,000 animals were sold for \$350,000.

The slaughter of brown bears continued; 1,500 of them realized only \$11,000, or less than \$7.50 per skin. The price of this fur has been going down for some time, which fact is due to the improved conditions in railway travel across Siberia, where the cars are kept warm and comfortable. Not a single white bear skin was brought to Irbit. They are said to be very scarce.

More than 180,000 "kolonki" (a species of the skunk) were killed and sold for only \$150,000, the skins averaging about 75 cents each. The tails of the "kolonki" are used by artists for paintbrushes. Of gray wolves, 16,500 were killed and realized a good price—\$6.50 each. This is said to be quite unusual.

It appears that all the valuable furs have their imitations abroad, even sable, splendid imitations of which are said to be made from squirrel.

[Various phases of the Russian fur industry have been presented in articles published in Daily Consular and Trade Reports for Sept. 17 and Nov. 1, 14, and 28, 1910; Aug. 12, 1911, and Feb. 6, 1912.]

Risks in Purchasing Chinese Cocoons.

Insurance companies at Shanghai have hesitated in insuring the money which silk merchants must carry into the Chinese interior for purchasing cocoons. For the Wusieh and Shao-hing cocoon markets alone \$10,000,000 in silver (representing nearly \$5,000,000 American gold) is required.

The Bureau of Forestry, Department of Agriculture, has issued a "Record of wholesale prices of lumber per 1,000 feet b. m., based on actual sales made f. o. b. mill for each quarter calendar year 1911." Copies can be obtained free on application to that bureau.

PROPOSED NATIONAL SCHOOL OF INDUSTRIAL ART.

At the annual meeting of the American Federation of Arts, in Washington, on May 9, resolutions were adopted relative to the establishment of a National School of Industrial Art at the Capital, and it was decided to urge action by Congress on the matter.

The plan for this school includes Federal support, through a national headquarters, to local schools in different sections of the country that are duly incorporated for the furtherance of industrial art education relating to the arts and crafts, the home industries, and the technical art products of a community.

The federation further states that different geographical sections require different schools that shall relate to the respective home and manufacturing interests. Manufactures into which art enters as a factor of production and value of product should have that Government support which is accorded to such interests in other countries, to the end that technical art products of the United States shall have an increased æsthetic value, implying also increased commercial value.

A committee has been authorized by the federation to develop this plan. It is evident that important results might be obtained through a national industrial school inspiring local schools to the uplifting of standards of quality. Such a movement has special significance in relation to the competition in foreign markets of American products in which art quality is a factor.

THE LONDON POLYTECHNICS.

[From the London Times.]

There are a number of institutions in London known as polytechnics where technical instruction is given to day and evening students. These institutions fill the same position as do the municipal technical schools of Birmingham, Plymouth, Portsmouth, etc., with the additional advantage that the polytechnics have teachers "recognized" by the University of London, and their students are therefore eligible for the internal degree. These institutions in London comprise the Southwestern, Northern, Regent Street, Battersea, Borough, and Woolwich Polytechnics, the Goldsmiths' Institute, the Northampton Polytechnic Institute, the Sir John Cass Institute, the Birbeck College, and the City of London College. There are similar institutions in the suburbs of Greater London.

The London institutions have cost more than \$5,000,000. The total ordinary receipts in 1909 amounted to \$1,004,762; the council's grant was \$377,135; the grant from the board of education, \$190,286; from the city parochial foundation, \$140,739; from the city companies, \$29,554. The total ordinary expenditure of all the institutions was \$1,045,310 and the expenditures of an exceptional nature were \$164,352.

There were 20,000 students enrolled in the polytechnics in 1910-11, and it appears that the ordinary cost of running the institutions was about \$50 per student. If account were taken only of the students who attended 75 per cent of the lectures and classes, it is probable that the cost would be \$250 per student per year.

Commercial Laws of the World.

There is being added to the library of the Bureau of Manufactures the new 26-volume work on the Commercial Laws of the World. It is printed in both English and Spanish, and may be consulted by the public. The first two volumes have been received.

Railway cars were imported by Belgium in January and February to the value of \$3,600,000 against \$2,400,000 in the first two months of 1911.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 652. Construction of post office buildings.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring, and interior lighting fixtures), of the following post offices: (1) Until June 18, at Kingfisher, Okla. Building is one story, basement, mezzanine and unfinished attic, and has a ground area of approximately 3,800 square feet; nonfireproof construction, stone and stucco facing, and tile roof. (2) Until June 24, at Union, S. C. Building will be one story and basement, of 4,117 square feet ground area, brick faced, with stone trimming and tin roof. (3) Until June 25, at Mansfield, Ohio. Building will be two stories and basement and have a ground area of about 7,800 square feet; first floor only of fireproof construction; tin roof; and stone facing. (4) Until June 26, at Newark, N. Y. Building is one story and basement and has a ground area of approximately 3,900 square feet, nonfireproof construction, stone, brick, and stucco facing, and tin roof. (5) Until June 27, at Chester, Pa. The work contemplated is the construction of a two-story, basement, and unfinished attic extension of approximately 2,300 square feet ground area. First floor only is fireproof construction, exterior facing of stone and brick, with slate roof, and there will be certain repairs and alterations in the present building. (6) Until July 1, at Newark, Ohio. The building is two stories and basement and has a ground area of approximately 6,900 square feet; fireproof construction throughout; granite and marble facing; and tin roof. Drawings and specifications of these various buildings can be obtained from the custodians of sites at the various points, or at the office of the Supervising Architect.
- No. 653. Supplies for Post Office Department.**—Sealed proposals will be received at the office of the Purchasing Agent for the Post Office Department, Washington, D. C., until June 12, 1912, for furnishing paper tape and ribbons for time recorders, motors for canceling machines, strawboard, guide cards, plain and printed "facing slips" for use as labels on packages of letters, time cards for street letter boxes, rubber and metal stamps, dies and type, malleable-iron castings and rings, bronze metal and brass safety key chains, flat steel key rings, German-silver badges for railway postal clerks, steel cutters for issuing money orders, side of leather, cotton canvas and remnants for repairing mail sacks, jute waste sacks, dials of pyralin or other suitable material, paint for street letter boxes, duck satchels for city collection service and leather satchels for special-delivery messengers, as may be required by the postal service during the fiscal year beginning July 1, 1912. Form blanks and proposals, with specifications and instructions to bidders, will be furnished upon application to the purchasing agent.
- No. 654. Ocean mail service.**—Proposals will be received at the Post-Office Department, Washington, D. C., until October 15, 1912, for ocean mail service, pursuant to the act of March 3, 1891, on the routes described, service to commence not later than January 1, 1913. Circulars containing a description of the routes, instructions to bidders, and blank forms of proposals, with accompanying bonds, can be obtained of the Second Assistant Postmaster General.
- No. 655. Switch panels.**—Proposals, in duplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until May 29, 1912, for 50 switch panels, time interval, in accordance with specifications 568 and 397-B and drawings 869 and 827-B. (Proposal No. 586.)
- No. 656. Air-lift pumping plant.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until June 11, 1912, for an air-lift pumping plant at the United States post office and courthouse at London, Ky. Copy of specification and drawing can be obtained of custodian at London, Ky., or of the Supervising Architect.
- No. 657. Tool chests.**—Proposals, in duplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until May 31, 1912, for 25 chests, tool, electrical engineers', complete, in accordance with specification 192-C and drawing 101b-1. (Proposal No. 587.)

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PUBLICITY AND THE AGENCY PROBLEM IN GERMANY.

[By Commercial Agent Archibald J. Wolfe.]

Publishers of American trade journals paying attention to the export trade and of export journals in general are apt to overlook one important medium for reaching an immense circle of readers in Germany. As a rule these publishers send their copies to individual addresses, either subscribers or persons specially selected as likely to be interested in American goods. The ratio of interest and importance to the individual advertiser in a paper carrying miscellaneous advertising is thus necessarily small. It would be to the great advantage of such publications and their advertisers if they carefully studied through special emissaries the means of reaching the business community of each country and adopted special circulation plans for each.

Now it happens that there exists in Germany an excellent machinery for reaching a vast number of readers which, for instance, is entirely lacking in England. The German is far less in the habit of subscribing to or regularly purchasing magazines and trade journals than the American or the Englishman. Every German city of consequence has a number of palatial cafés, which are nothing else than huge clubhouses without membership formality. In any one of these cafés will be found at any time of day and night hundreds and even thousands of patrons glancing over domestic and foreign newspapers and magazines. These cafés maintain libraries of directories of the entire world, and keep on file newspapers from St. Petersburg to New Zealand, from Yokohoma to the Cape of Good Hope. Every German export paper is to be found in such a café. Likewise every hotel of consequence maintains a magazine and newspaper library.

Advantage of Having Trade Papers in Cafés.

A few hundred copies of American trade magazines and export periodicals judiciously placed in cafés of Germany would reach a circle of readers at least several hundred per cent larger than indicated by the number of copies filed. These papers would be read by representative business men and likely agents. Of course, it would be well to have such publications in German, but English will be also understood in the absence of German publications.

The German edition of an American export paper was found by one of my informants of the Berlin trade press in a hotel in Dusseldorf. He showed the periodical to a friend, who saw on the front page the picture of a motor boat.

"Here is exactly what I have been looking for; where is their agent in Berlin?" asked the latter. The advertisement was in German, but there was no indication of a place in Germany where such a boat could be had. Now, when a man wants to buy a motor boat he does not waste months in correspondence with foreign countries, but wants to see the boat and buy it quickly. This applies to most articles which it is hoped to sell abroad through advertising in export journals. Business with Germany can not be done at long range. It is necessary to have resident agents here. An advertisement of an American article which does not mention an agent in Germany loses much of its force with a German.

One of the results of placing these publications in the cafés of Germany would be the receipt by the advertisers of a large number of applications for agencies. If properly sifted, valuable connections may be made.

The Agency Problem.

American manufacturers have hitherto followed generally one of two plans in selecting their agents in Germany. Either they receive an application from some unsolicited source for their agency, or they procure from some one a list of agents handling similar goods and proceed to offer them their agency.

In the first instance, the applicant is frequently an undesirable agent. He has seen somewhere the advertisement of the American manufacturer and thinks it would be a good thing to get his agency. Now, if the advertisement of the American manufacturer reached very wide circles of interested readers the applications would be more numerous and there would be a greater chance of hearing from a desirable applicant.

In the second instance, the manufacturer is even worse off. He comes to an agent as a petitioner and the agent has the upper hand. If he is a machinery manufacturer he is apt to be referred to one or the other of the world-famous machinery houses in Berlin or Cologne, which are overcrowded with American agencies. In fact, they are not agents at all; they are jobbers. They have absolutely no interest in pushing any particular make of machine or tool in preference to another. It is inconceivable how American manufacturers of machinery can be content to turn over the handling of their products to a concern without troubling themselves to know where their goods finally go. They would not dream of doing business in this manner in Illinois, Alabama, or Massachusetts.

A manufacturer of a certain machine tool came to Berlin and was heartbroken when a great machinery jobber refused to add his line to several hundred others handled by him. It was the best thing that could have happened to him.

Agent Must be Genuine Representative.

If the manufacturer of a machine desires to find a market in Germany, he must find an agent capable of representing him properly. It is not enough to sell a few machines to a great jobber. The representative should not be a man handling three or four or, as in the

case of the houses referred to, several dozen competing makes. He must understand the science of making the manufacturer's name and make known, and appreciated. The tremendous value of an established reputation in Germany is an asset of the highest importance. The manufacturer must know where his goods go. His representative must watch for openings. The experience of a well-known British manufacturer of water purification plants illustrates the point. This concern sold a water purification plant to a house in Germany. It occurred to the manufacturer a year or two later that the order should have been repeated and he wrote his customer three or four letters on the subject. A casual German visitor told the British manufacturer in due course that he had seen a similar plant built under a German patent by a concern in Germany which was doing a tremendous business. Investigation showed that the erstwhile customer simply discovered that the Britisher had not patented his plant, and the German did it himself, a piece of sharp practice, perhaps, but no excuse for ignorance and negligence on the part of the manufacturer.

If a German manufacturer had sold a water purification plant, say, in Belgium or Turkey, he would not have waited years and then contented himself by writing a few letters. He would have concluded that there was a chance of doing business in that district, sent a salesman to investigate, and by his watchfulness would have prevented a state of affairs whereby he had sold one plant and enabled an imitator to do a tremendous business.

There is a market in Germany for many American articles, but the American manufacturer who seeks to cultivate it must do so on a rational basis, and then there will be no place for the frequent complaint: "Yes, I had at one time a good business in Germany, but it has dwindled to nothing."

The proper selection of agents in Germany is an essential condition to permanent success. Next is the proper observance of good faith with one's own agents.

[Mr. Wolfe furnished with the foregoing report the names and addresses of the principal cafes in Berlin maintaining files of foreign magazines; the list may be obtained by application to the Bureau of Manufactures.]

LAWN TENNIS POPULAR IN JAPAN.

[From Consul General Thomas Sammons, Yokohama.]

Lawn tennis has become very popular among Japanese high-school and college students. Intercollegiate games have also become popular among the students and their friends. Among the well-known institutions that have a large number of enthusiastic tennis players are the following: Tokyo Higher Normal School; Tokyo Commercial School (higher); Waseda University, Tokyo; Kyoto University, Kyoto; Third High School, Kyoto.

The foreign communities in the various ports, Yokohama, Kobe, and Nagasaki, have tennis clubs, which for convenience may be addressed "Foreign Tennis Club," at the various ports named. The leading foreign tennis club here is known as the Ladies' Lawn Tennis Club. Tennis rackets are already being manufactured in Japan, there being six factories in Tokyo alone [a list of which may be had from the Bureau of Manufactures, Washington, D. C.].

CONSTRUCTION WORK ABROAD.**THE NETHERLANDS.**

[From Consul General S. Listoe, Rotterdam.]

Construction of Three New Harbors at Rotterdam.

Fully in accordance with the principle thus far adhered to by the Rotterdam magistrates, viz, "not to wait until there is a shortage of harbor facilities, but to be ahead of the needs of navigation by a choice offering of docks," a plan has again been submitted to the city council of Rotterdam for three new harbors, with quays and docks, in the extreme western section of this city, on the right side of the River Maas.

Details of the New Harbors.

The dimensions of two of the proposed harbors are to be as follows: Yselhaven, length 880 yards, width 130 yards, depth 33 feet; Lekhaven, length 600 yards, width 130 yards, depth 33 feet. Both of these harbors are intended for seagoing steamers of large size, and the surrounding quays will be constructed of large concrete blocks, which latter have in many instances proved to be more reliable than the old-style quay walls built on a pile foundation, besides being cheaper.

The total length of quays which will be available to shipping at this port is thus again increased with 3,100 yards, surrounding which an area of 26 acres will be at the disposal of those interested in navigation for building docks, sheds, cranes, and all other and necessary implements for handling merchandise and loading and discharging steamers.

The third harbor is planned on an entirely different scale, viz: Keilehaven, length 1,000 yards, width 80 yards, depth 13 feet. This harbor is intended for lighters and all such crafts as are used by the manufacturing interests, and the 22 surrounding acres are expected to be utilized for establishing various manufacturing plants, to be erected in the near future. This harbor will not be constructed with quay walls, but with a slope of brick, which is considered satisfactory for the use to which the harbor is in all probability destined.

The total amount involved in constructing these three harbors is estimated at \$3,100,000. The width of 130 yards for the two principal harbors has been determined upon with a view to the ever-increasing use of floating mechanical installations for discharging grain, ore, and other staple articles, and for bunkering coal.

Depth of Various World Canals and Harbors.

The question of the depth to which the new harbors shall be dug has been the subject of a thorough study by engineers of the department of public works of the city of Rotterdam, and their report gives the following information as to the increasing draft of steamers in the world's traffic, and the depth of other harbors and canals:

The Suez Canal will at the close of 1913 have a depth of 36 feet, and steamers with a draft of 31½ feet will be allowed to pass through.

The Panama Canal, to be opened in the beginning of 1915, with a depth of 45 feet, will accommodate vessels drawing 40 feet.

The Kaiser Wilhelm Canal, though of less importance to the international traffic, is now being dredged to a depth of 35½ feet, and the new sluices under construction are being built for a future depth of 45 feet.

The dimensions of the larger vessels will for the future be governed by the draft permitted through the Panama Canal. The Suez Canal can readily be rendered

suitable for larger vessels, and its depth increased at comparatively small expenditure in consequence of the sandy bottom and the absence of sluices.

The existing conditions at Rotterdam and harbor competitors on the Continent are defined in the following table:

Ports.	Depth of waterway.		Depth of harbors.	
	High water.	Low water.	Existing.	In construction.
	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>
Rotterdam.....	33	28	33	30
Hamburg.....	34	28	30	33
Antwerp.....	41	26	30	37
Amsterdam.....	37	32	32	33
Bremerhaven.....	35	24	33	33
Emden.....	33	33	28	35

The relative figures for the British ports have been ascertained as follows:

Ports.	Depth of fairway.		Depth of harbors.	
	High water.	Low water.	Existing.	Proposed.
	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>
London:				
London Docks.....	37	16	25	25
West India Docks.....	41	20	29	31
Royal Victoria Dock.....	51	30	26	28
Royal Albert Dock.....	51	30	27	30
Southern Dock (proposed).....	51	30	.....	44
Northern Dock (proposed).....	51	30	.....	44
Tilbury Docks (old).....	51	30	38	38
Tilbury Docks (new).....	51	30	.....	48
Southampton.....	45	32	35	40
Liverpool.....	54	37	35	.....

The third group of harbors, which were of considerable influence in the planning of the new harbors, are those of North America; as follows:

Ports.	Maximum depth of harbors.		Harbors building.	
	Low water.	High water.	Low water.	High water.
	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>
New York.....	35	40	40	46
Philadelphia.....	30	.....	35	.....
Boston.....	35	45	.....	.....
Baltimore.....	35	36	.....	.....
Quebec.....	33	48	.....	.....
Montreal.....	26	.....	30	.....

From the above figures the conclusion has been drawn that a minimum depth of 33 feet at low water, corresponding to 38 feet at high tide, is required for Rotterdam's new harbors if the port cares to remain in line with other prominent ports.

Railway Connection—Waterway to Sea—Annexing Schiedam.

Arrangements will be made with the Holland Railway Co. to connect the new harbors with the railway system of the Netherlands.

The natural consequence of the building of larger vessels will in time necessitate deepening the New Waterway to the North Sea, but in an official pamphlet published by the Government engineer, who is in charge of the superintendence of that fairway, the state-

ment is made that the depth of the New Waterway can be increased 3 to 6 feet at a comparatively small outlay.

The outside limits of the city of Rotterdam on the right side of the Maas River have by these plans been appropriated as far as possible, and these new harbors will border upon the dividing line between Rotterdam and Schiedam. However, before being able to proceed any further in constructing new docks, etc., it will be absolutely necessary for Rotterdam to annex the city of Schiedam.

FRANCE.

[From Consul General A. Gaulin, Marseille.]

Town Planning in Marseille.

Expropriation proceedings on an extensive scale were started during last year by the municipal government of Marseille, for renovating one of the oldest sections of the city (the so-called "Quartier de la Bourse" or Commercial Exchange quarter), in accordance with plans adopted a number of years ago. The present network of narrow, winding streets in that quarter will be transformed into broad thoroughfares, and a large number of antiquated structures will be torn down and replaced by modern buildings.

Some progress was made during the past year on the construction of the Marseille-Rhone Canal, the Madrague Basin, and a seventh dry dock. The freight-handling facilities of the port were considerably increased, the new appliances comprising 5 electric cranes, installed by the chamber of commerce, and 20 hydraulic cranes belonging to the Compagnie des Docks et Entrepôts (Bonded Warehouse Co.). Further additions will be made in the near future.

SCOTLAND.

[From Consul Rufus Fleming, Edinburgh.]

Water-supply schemes.—Dunbar will construct auxiliary waterworks, to cost about \$80,000. Letters to contractors in regard to materials, etc., may be addressed in care of the Town Clerk, Dunbar, Scotland. Waterworks are to be constructed in East Plean, which will require about $2\frac{1}{2}$ miles of cast-iron pipes, varying from 2 to 5 inches in diameter, and relative supplies and materials. Letters may be addressed East Plean Waterworks, care of Thomas Lupton, Esq., District Clerk, 22 King Street, Stirling, Scotland.

Fire-clay pipe sewers.—The eastern district committee of the Stirling county council will soon award the contract for laying $1\frac{1}{2}$ miles of fire-clay pipe sewers (from 6 to 15 inches in diameter), with man-holes and other appurtenant works, and constructing liquefying tanks, detritus chamber, etc. Proposals as to materials may be addressed Laurieston Drainage, care of J. H. Burns, District Clerk, Falkirk, Scotland.

Public hall furniture.—A large public hall, for which the sum of £100,000 (\$486,650) was given to the city of Edinburgh many years ago by a citizen, is nearing completion. It will be devoted principally to musical purposes and will seat 3,500. Its furnishing will soon engage the attention of a committee of council. Letters relative to styles of seats and other furnishings for such places of entertainment may be addressed to the Town Clerk, Edinburgh.

ENGLAND.

[Taken from the local press by Consul Benjamin F. Chase, Leeds.]

Prospective Enterprises in Yorkshire.

The town council of Batley, Yorkshire, has decided to expend \$38,932 in purchasing a new 740-kilowatt reciprocating engine set and a like amount for new cables for its electric plant.

The town of Dewsbury, Yorkshire, is enlarging its electric plant and will expend about \$70,564 on new machinery and cables. A steam turbine set (1,000 kilowatts) has been selected and the project approved by the council.

A project is under way by residents of Barnoldswick, Yorkshire, to construct a railway to connect that town with Gisburn, about 4 miles. Estimated cost is from \$204,400 to \$219,000. Fred H. Slater presided at a recent meeting for this purpose at Barnoldswick, and E. O. Ferguson, an engineer, seems also to be interested.

AUSTRIA-HUNGARY.

[From the Zentral Anzeiger für das Öffentliche Lieferungswesen, Vienna.]

Tramway, Wharf, and Hospital.

Arrangements have been concluded for constructing a tramway from Bozen to Leifers at a cost of \$200,000, half subscribed by the city authorities and half by independent sources.

As a result of representations made by the Fiume shipping authorities, the Austrian Ministry of Commerce has arranged to build at that port a new ferroconcrete wharf, about 55 yards wide and 90 yards long, to cost \$500,000.

The Fiume municipal authorities have decided to erect in that city an infirmary at a cost of \$1,076,000 and a fever hospital at a cost of \$210,000. Work on both buildings will be commenced this year.

The communal authorities of Zwittau have decided to arrange for a \$100,000 loan for waterworks.

GREECE.

[From report of British consul at Patras.]

Railway Line to Turkey Proposed.

It is proposed to extend the present railway line of northwestern Greece, which starts from Krioneri on the northern side of the Gulf of Corinth, opposite Patras, passing through Missolonghi with Agrinion as a terminus, to the town of Arta on the Turkish frontier; but it has not yet been decided from which point of the line the proposed extension will start.

INDIA.

[From Consul Edwin S. Cunningham, Bombay.]

New Scientific Library Building.

Sir Vasanji Trikamji Mulji, of Bombay, has given \$73,000 for founding a scientific library in connection with the Royal Institute of Science. The Bombay Government officers who will administer the fund are the Educational Secretary and the Director of Public Instruction, with the aid of Mr. G. Wittet, consulting architect to the Government. Plans have been made for a \$33,000 building, the erection of which will be a continuation of the plans for buildings for this institution. Structures commenced last year and still building are the Sir Cowasjee Jehangir buildings and public hall, Sir Currimbhoy Ebrahim buildings, and the Sir Jacob Sassoon buildings. The Royal Institute of Science was founded by the Bombay Government for the promotion of science in its higher branches.

[European press dispatches, supplementing Consul Lupton's report in Daily Consular and Trade Reports for May 11.]

The Trans-Persian Railway.

A dispatch from Simla, India, says that Mr. Johns, the engineer surveying the Mekran section of the proposed Indo-Persian railway, has found a good route from Karachi to Gwadar with a general gradient of 1 in 250, the steepest being 1 in 90.

Reuter's Agency learns that during the past few weeks important progress has been made in connection with the preliminary stages of the proposed Trans-Persian railway. As a result of a series of conferences which have taken place in Paris between the international groups, the Statutes of the Société d'Etudes, which is to deal with the question of the necessary surveys for the line, the possibilities and costs of the undertaking, the concession from the Persian Government, and other matters, have been formulated.

The Société d'Etudes will comprise three groups—British, French, and Russian—each of which will provide \$150,000 toward preliminary expenses. The council of administration will have 24 members—8 British and a similar number of French and Russians. There will also be a committee of direction composed of 12 members selected from the council of administration.

It is understood that Sir William Garstin will be vice president, and that the British group will include representatives of Messrs. Baring, Parr's Bank, the Imperial Bank of Persia, Messrs. E. D. Sassoon, and Messrs. Forbes, Forbes, Campbell & Co., the Indian merchants.

CANADA.

[From Consul Felix S. S. Johnson, Kingston, Ontario.]

Kingston Harbor Improvements.

A delegation from this city, which waited on the Minister of Public Works at Ottawa, were assured that Kingston would be made a national port. The harbor improvements will cost about \$1,750,000, and will make Kingston the Buffalo of Canada. The city transfers to the Government the bridge spanning the inner harbor. It will be replaced by a causeway costing \$230,000 preliminary to dredging operations. It is likely that the span in the causeway will be operated on the jackknife principle. Tenders for the causeway will be called for not later than August 1. In the meantime plans and specifications will be prepared for a temporary bridge and tenders invited.

That the Canadian Government does not intend to lose any time in constructing the causeway is shown by the fact that an engineer of the Public Works Department left on May 16 for Chicago to confer with some construction companies in regard to steel to be used. After the causeway is built the harbor will be dredged both above and below, and the wharves and elevators constructed.

CHILE.

Award of Valparaiso Harbor Contract.

Consul Winslow, of Valparaiso, corroborated the dispatches in Daily Consular and Trade Reports for May 13 concerning the tenders for the Valparaiso port works. A further dispatch from Santiago states that the Chilean Government accepted the bid of an English firm, the work to start next October and cost \$12,652,000. The successful tenderers are Pearson & Son.

ARGENTINA.

[From the Boletín Oficial, Buenos Aires.]

New Department of Agriculture Building.

The executive authorities are authorized by law 8881 to give out to contract the construction of a building for the Ministry of Agriculture and for all the offices belonging to that department. The sum earmarked for this purpose amounts to 5,000,000 pesos currency (\$2,123,000).

Manchester cotton yarn was shipped to the United States during the first four months of this year to the extent of 1,943,800 pounds.

NORGINE FOR SOFTENING TEXTILE GOODS.

[From Consul General Henry Bordewich, Christiania, Norway.]

The agglutinant "norgine" is not manufactured in Norway. This information I have from a Norwegian official who has looked into the matter carefully. His belief is that norgine is manufactured by one factory only in all Europe (Die Fabrik Norgine, of Aussig am Elbe in Bohemia.) Norgine is said to be manufactured from kelp, which consists of the ashes of the seaweed *Laminaria*. Kelp is an article of export from Norway, the shipments in 1910 aggregating 2,318 English tons, all to Great Britain. The total export of iodine was 13 tons, all to Germany.

[From Consul J. I. Brittain, Prague, Bohemia.]

The Manufacture of Norgine.

Norgine is manufactured at the chemical works of Dr. Victor Stein at Aussig, Bohemia. The inventor of norgine is said to be a Frenchman from whom Dr. Stein purchased the patent rights for Austria. So far as could be ascertained, norgine is chiefly used here in the textile industry for stiffening and dressing purposes, and gives very satisfactory results. It is, however, not used as a substitute for potato starch, dextrine, etc.; being used only as an admixture in starch to give the goods a softer and more flexible feel.

Norgine is therefore considered as a ligament or agglutinant. The seaweed from which it is made is imported from Sweden, the ashes from seaweed being also imported for making certain grades of the product. There are manufactured eight grades of norgine which again are divided into several classes. A by-product of norgine is iodine.

A SPANISH MUSICAL SUCCESS.

[From Consul Robert Frazer, Jr., Valencia.]

The preeminent Spanish musical success of the past year was called *La Corte de Faraón* (The Court of Pharaoh), the music being by Vicente Lleó and the libretto by Guillermo Perrín and Miguel de Palacios. It was the enthusiastic encomium of the piece by an American theatrical manager who recently visited this city that prompted the little article in *Daily Consular and Trade Reports* for March 30, 1912. There is a legend on the cover of the music stating it to be "the property of the publisher in all countries," the publisher being Ildefonso Alier, Plaza de Oriente, No. 2, Madrid. The music, which is the best part of the work, is unusually striking, and I and other Americans who have heard it believe it to be of the sort which would be received in the United States. The book, while very clever in Spanish, is treated with a degree of license, both as to plot and dialogue, which would probably require its being written anew for the American stage. The printed music as sold arranged for the piano and voice fills 78 pages, and sells for 13 pesetas (about \$2.40). Others among the most popular musical pieces are: *La Reina Mora* (The Moorish Queen), 12 pesetas (\$2.16); *Los Bohemios* (The Bohemians), 12 pesetas; *Alma de Dios* (The Spirit of God), 9 pesetas (\$1.62).

The Association of Spanish Dramatists (*La Sociedad de Autores Espanoles*), referred to in the previous report, has its headquarters in Madrid.

AMERICAN TRADE WITH THE PORT OF LONDON.

[By Consul General John L. Griffiths.]

That the port of London plays an important part in the American trade with the United Kingdom is found in the fact that of the total imports, valued at \$606,112,871, from the United States and possessions into the United Kingdom last year, articles amounting to \$94,080,685 entered the port of London from the United States. Of the total exports, valued at \$247,736,242, invoiced through the several American consulates for the United States and possessions in 1911, \$117,863,539 worth were declared through the consulate general at London.

Imports from the United States.

Among the principal imports last year were wheat, wheat meal and flour, lard, cotton, leather, maize, motor cars, and oxen and bulls. The following table shows the quantity and value of the principal imports from the United States last year:

Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
NONDUTIABLE.			NONDUTIABLE—continued.		
Alcohol, methyllic.. gallons..	393,999	\$202,563	Meats—Continued.		
Animals, live:			Pork, salted..... cwt..	6,384	\$71,907
Cows..... number..	3,568	302,326	Preserved..... do.....	38,777	752,308
Horses..... do.....	509	221,182	Metals:		
Oxen and bulls..... do.....	70,024	6,816,229	Brass and bronze man-		
Apparel.....		105,705	ufactures.....		196,665
Arms, ammunition, etc.		235,835	Copper—		
Bladders and casings,			Manufactures of.....		323,209
pounds.....	1,797,738	442,063	Part wrought..... tons..	902	261,010
Books, printed.....		158,877	Unwrought..... do.....	8,103	2,284,226
Boots, rubber..... pairs..	187,800	167,724	Lead, pig and sheet,		
Breadstuffs:			tons.....	4,025	256,718
Barley..... cwt.....	142,200	251,194	Tin in blocks..... tons..	440	467,218
Maize..... do.....	1,636,800	2,063,377	Motor cars and parts.		2,516,095
Maize meal..... do.....	207,410	352,675	Musical instruments and		
Rolled oats..... do.....	66,355	297,825	parts.....		455,695
Wheat..... do.....	2,966,000	5,879,846	Oils:		
Wheat meal and flour,			Animal..... cwt.....	27,566	201,483
cwt.....	1,780,900	4,154,288	Petroleum, lamp oil,		
Butter..... cwt.....	14,626	370,000	gallons.....	47,791,394	2,938,106
Caoutchouc..... do.....	6,798	138,121	Lubricating..... gallons..	13,843,103	1,945,392
Cheese..... do.....	48,414	904,941	Gas..... do.....	35,373,022	1,205,237
Cordage.....		212,749	Cottonseed, refined,		
Cotton..... centals.....	223,572	3,657,280	tons.....	6,244	997,131
Cotton piece goods..... yards..	1,370,267	209,565	Turpentine..... cwt.....	217,033	2,118,314
Electrical goods, wires and			Essential.....		222,063
cables.....		145,143	Oilseed cake..... tons..	15,592	497,405
Fertilizers, phosphate of			oleo oil, margarin, and re-		
lime..... tons.....	30,338	246,800	fined tallow.....		398,688
Fish, canned..... cwt.....	98,921	1,316,636	Painters' supplies:		
Fruit:			White lead..... cwt.....	31,719	127,440
Apples..... do.....	50,661	214,900	Zinc oxide..... do.....	46,851	225,806
Pears..... do.....	23,167	103,890	Other.....		226,737
Dried and preserved.....		254,533	Paper:		
Furs, undressed.....		443,947	Millboard and wood		
Hair.....		127,745	pulp..... cwt.....	19,735	84,181
Hay..... tons.....	11,580	219,518	Printing and writing,		
Hops..... cwt.....	80,461	2,383,206	cwt.....	47,649	336,391
Lard..... do.....	397,276	4,687,096	Paraffin wax..... tons..	334,709	993,792
Leather..... do.....	74,121	3,845,679	Poultry and game.....		207,610
Machines and machinery:			Roan..... cwt.....	205,517	724,155
Agricultural.....		361,478	Seeds:		
Electrical.....		296,516	Clover and grass..... do....	4,839	80,823
Sewing machines and			Other.....		41,258
parts.....		69,718	Soap:		
Typewriters and parts.....		1,742,499	Household..... cwt.....	47,180	282,822
Other.....		2,380,794	Powder..... do.....	8,337	44,641
Meats:			Toilet..... do.....	6,392	257,861
Bacon..... cwt.....	81,586	1,161,001	Starch, etc..... do.....	143,070	294,447
Beef—			Stationery, other than paper		434,501
Chilled..... do.....	66,487	730,249	Tallow, unrefined, and		
Salted..... do.....	8,778	58,082	stearin..... cwt.....	18,437	147,650
Frozen..... do.....	11,913	106,644	Toys and games.....		96,279
Hams..... do.....	100,549	1,391,347	Varnish, not containing		
			spirit..... gallons..	231,547	185,273

Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
NONDUTIABLE—continued.			DUTIABLE—continued.		
Wood, and manufactures of:			Motor spirit..... gallons..	17,872,110	\$1,373,193
Furniture woods—			Spirits, sweetened, in bot-		276,995
Mahogany..... tons..	7,032	\$393,896	tles.....		
Other..... do.....	38,692	1,374,567	Sugar and manufactures:		
Fir..... loads.....	62,202	1,078,592	Confectionery.....		192,503
Furniture, and other			Glucose—		
manufactures.....		935,813	Solid..... cwt.....	164,107	353,524
Oak, hewn..... loads..	54,219	1,575,933	Liquid..... do.....	436,141	918,571
Pit props..... do.....	1,932	50,388	Molasses..... do.....	752,020	880,985
Staves..... do.....	3,249	85,655	Tea..... pounds.....	2,128,213	349,799
Other—			Tobacco, and manufactures		
Hewn..... do.....	3,098	91,685	of:		
Sawn or split..... do..	18,733	665,105	Manufactured.....		38,703
Parcels post..... number..	48,830	236,700	Unmanufactured—		
All other articles.....		7,704,048	Stemmed pounds.....	2,342,517	352,624
Total.....		84,369,313	Unstemmed..... do....	10,146,951	1,412,633
DUTIABLE.			Wine, in casks..... gallons..	55,662	48,490
Fruit:			All other articles.....		22,225
Dried—			Total.....		7,711,372
Plums..... cwt.....	28,082	305,864	Grand total.....		94,080,685
Prunes..... do.....	3,094	36,041			
Raisins..... do.....	9,022	87,076			
Preserved in sugar.....		963,132			

Exports to United States and Possessions.

There was an increase of \$3,589,102 in the value of the articles invoiced through the consulate general at London to the United States and possessions compared with 1910. The gain in the shipments to the United States was \$3,331,758, to the Philippines \$46,736, to Hawaii \$130,323, and to Porto Rico \$80,285. The articles contributing largely to the gain to the United States were automobiles and parts, books, coffee, opium, hats and caps, platinum, tin, precious stones, rubber, and seeds and plants. There was a large decrease in the shipments of bristles, cotton manufactures, coal-tar products, feathers, furniture, china and earthenware, grease, leather, linseed, copper, oils, ores, skins and furs, wool and hair, and antiques, etc. The following table shows the exports to the United States and possessions for 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
TO UNITED STATES.			TO UNITED STATES—contd.		
Animals.....	\$521,882	\$361,683	Drugs and chemicals—		
Antimony.....	159,942	133,877	Continued.....		
Automobiles, and parts of.	242,457	458,829	Opium.....	\$334,506	\$613,762
Beer, ale, and stout.....	728,843	831,495	Oxides.....	236,267	264,696
Biscuits.....	(1)	130,030	Photographic plates		
Boot polishes, etc.....	38,436	45,688	and materials.....	(2)	225,965
Books.....	2,368,404	2,868,055	Senna.....	62,422	68,051
Boots, shoes, etc.....	(2)	80,051	Sodas.....	30,579	10,238
Bristles.....	1,031,354	865,374	Sulphate of ammonia..	(2)	898,144
Brushes, tooth, hair, etc.	167,707	155,628	Other drugs and		
Carpets.....	141,086	158,338	chemicals.....	2,465,506	1,442,946
Cement.....	49,416	46,812	Electrical apparatus and		
Chalk.....	94,282	91,927	appliances.....	157,398	83,759
Clocks and watches.....	49,932	57,667	Emery.....	48,145	29,167
Cocoa and chocolate.....	471,297	566,235	Feathers.....	4,035,546	2,767,396
Coffee.....	201,116	3,397,859	Floor cloths.....	713,734	663,681
Colors, paints, and var-			Fruits, nuts, and vegeta-		
nishes.....	300,456	310,355	bles.....	336,163	541,858
Confectionery.....	42,933	20,373	Fuller's earth.....	115,874	130,840
Cotton manufactures.....	692,996	555,427	Furniture.....	640,568	339,855
Drugs and chemicals:			Glass, china, and earthen-		
Acids.....	142,581	183,613	ware.....	451,341	166,568
Bismuth.....	191,692	34,335	Gloves, hosiery, etc.....	612,690	107,390
Coal-tar products.....	440,134	266,612	Glue and gelatin.....	94,552	89,547

¹ Included in provisions.² Included in leather.³ Included in drugs and chemicals.

Articles.	1910	1911	Articles.	1910	1911
TO UNITED STATES—contd.			TO UNITED STATES—contd.		
Glycerin.....	(1)	\$680, 425	Tobacco and cigarettes...	\$166, 086	\$209, 672
Grease.....	\$976, 633	180, 226	Wearing apparel.....	324, 958	380, 005
Gums.....	419, 320	506, 321	Wines and spirits.....	1, 150, 595	1, 330, 606
Hair, cow, calf, etc.	819, 526	905, 916	Woods.....	460, 570	471, 212
Hardware.....	18, 080	11, 956	Wool and camel and goat hair.....	3, 790, 938	2, 234, 723
Hats and caps.....	427, 212	544, 069	Woolen and worsted goods.....	1, 758, 974	1, 755, 935
Hemp, flax, and tow.....	206, 276	328, 024	Works of art:		
Household effects.....	(2)	397, 977	Pictures, sculptures, etc.....	8, 378, 751	3, 978, 843
Indigo.....	40, 482	47, 185	Antiques, furniture, etc.....		
Ivory.....	551, 967	491, 122	All other articles.....	929, 430	285, 596
Laces.....	84, 982	67, 006	Total.....	112, 734, 567	116, 066, 325
Leather.....	547, 980	399, 058	TO PHILIPPINE ISLANDS.		
Linens.....	138, 271	103, 445	Cotton and other textiles.....	257, 513	193, 824
Linseed.....	1, 168, 853	395, 118	Metals, manufactures and hardware.....	308, 127	270, 982
Machinery.....	202, 364	149, 150	Paints, oils, white lead, etc.....	85, 392	74, 078
Metals:			Drugs and medicines.....	38, 646	56, 021
Iron and steel, and manufactures.....	747, 847	194, 598	Scientific instruments and machinery.....	11, 564	33, 252
Aluminum.....	(2)	447, 051	Provisions and preserves.....	512, 407	209, 395
Copper.....	1, 723, 020	873, 219	Condensed milk.....	(3)	413, 038
Platinum.....	(2)	1, 579, 349	All other articles.....	124, 736	134, 521
Tin.....	18, 654, 874	21, 166, 549	Total.....	1, 338, 385	1, 385, 121
Other.....	1, 799, 075	890, 232	TO HAWAII.		
Mica.....	151, 302	147, 157	Provisions and preserves.....	6, 509	7, 001
Musical instruments.....	21, 016	69, 259	Wines, spirits, and beer.....	7, 071	7, 856
Mustard.....	459, 084	547, 968	Textiles.....	24, 978	15, 720
Oils.....	3, 096, 206	2, 184, 521	Sulphate of ammonia.....		131, 021
Ores, iron, etc.....	998, 020	357, 411	Metals and manufactures.....	4, 064	2, 135
Paper and paper hangings.....	439, 724	361, 713	Cement.....		12, 823
Paper stock.....	811, 515	627, 632	Motor cars.....	0, 570	3, 796
Perfumery.....	54, 426	76, 224	All other articles.....	4, 838	4, 091
Pitch and tar.....	44, 793	43, 802	Total.....	54, 120	184, 443
Precious stones.....	9, 131, 081	10, 738, 763	TO PORTO RICO.		
Preserves, pickles, etc.....	1, 199, 647	1, 210, 713	Metals and manufactures of.....	34, 396	57, 190
Provisions, cheese, bacon, etc.....	737, 056	786, 570	Paints, oils, white lead, etc.....	23, 826	38, 753
Rice.....	240, 205	191, 391	Provisions and preserves.....	78, 183	20, 836
Rubber, and manufactures of:			Condensed milk.....	(4)	30, 704
Raw.....	11, 005, 530	13, 733, 753	Chocolate.....	(5)	67, 106
Clothing, etc.....	703, 831	483, 178	Drugs and medicines.....	5, 237	11, 455
Saddlery.....	40, 114	49, 472	All other articles.....	5, 723	1, 606
Scientific and optical instruments.....	105, 781	94, 169	Total.....	147, 365	227, 650
Seeds, plants, etc.....	1, 027, 792	1, 538, 806	Grand total.....		
Shellac.....	23, 393	0, 496		114, 274, 437	117, 863, 539
Shells.....	860, 579	815, 350			
Silks.....	482, 454	504, 209			
Soaps.....	204, 253	198, 060			
Skins, furs, etc.....	12, 274, 952	11, 850, 918			
Smokers' requisites, pipes, etc.....	(4)	325, 882			
Spices.....	89, 927	84, 548			
Sponges.....	51, 154	41, 829			
Stationery.....	718, 511	592, 569			
Sticks and canes.....	38, 042	43, 341			
Straw plait and braids.....	504, 013	511, 951			
Straw manufactures.....	80, 339	34, 192			
Stone, marble, granite, etc.....	36, 824	26, 142			
Tea.....	3, 194, 414	3, 698, 149			

1 Included in grease.
2 Included in furniture.
3 Included in other metals.

4 Included in all other articles.
5 Included in provisions.

The total value of returned American goods invoiced through the London consulate general during last year was \$2,298,754, against \$1,730,303 for 1910. The principal items for last year were: Pearl necklace, \$498,617; leather and manufactures, \$319,671; motor cars and parts, \$281,465; metals and manufactures, \$172,647; horses, \$191,643; machinery, \$117,728; and dental gas, \$74,457.

Tonnage of Total Imports, Shipping, and Port Improvements.

During the year ended March 31, 1911, 2,173,223 long tons of imported goods for warehousing or for direct delivery to land conveyances were handled by the port authority against 2,050,795 tons

in the previous year. The principal increase was in the chilled-beef imports, due to the new weekly line from the River Plate, the receipts of which amounted to 215,446 tons, compared with 138,022 tons. There was an increase of 15,216 tons in the quantity of wool handled, while the imports of softwood increased from 406,213 tons to 432,378 tons.

The net registered tonnage of shipping which entered and left the port of London, and paid river-tonnage dues during the year ended March 31, 1911, amounted to 29,395,636 long tons, compared with 28,579,648 tons for the previous year, of which 19,656,193 represented foreign and 9,739,443 coastwise tonnage. The shipping that used the docks represented 18,153,781 tons, of which 15,494,286 tons were foreign and 2,659,495 tons coastwise. The shipping that entered the dry docks of the port of London aggregated 2,235,295 gross tons.

Improvements are contemplated by the port of London authority involving an expenditure of about \$70,000,000. The improvements that are necessary without delay include the construction of new docks and the extension of old ones, further railway facilities, the installation of modern equipment, and dredging. The construction of the new dock will be commenced without delay. It will have an area of 65 acres, the quays will be 9,200 feet long, and the dock proper 4,600 feet long.

CHINESE TIN AND ANTIMONY.

[From Consul General Samuel S. Knabenshue, Tientsin.]

Americans seek information in regard to Chinese exports of pig tin and antimony regulus. Neither of these metals is found in North China. Antimony is found in western Central China, and tin also in that region and in the extreme southeast. The Yangtze River runs eastwardly through the center of China, coming to the sea at Shanghai. The West River, farther south, flows eastward, reaching the sea in the vicinity of Canton. These are the trade routes for these exports. Tientsin is 750 miles north of Shanghai, and hence products of Central China never reach Tientsin for export.

The total exports of antimony regulus in 1910 were 152,077 piculs of 133½ pounds each, the share coming through the various ports being in piculs as follows: Changsha, 133,550; Yochow, 15,624; Hankow, 2,418; Shanghai, 81; Wuchow, 320; Nanning, 84.

The exporting points for pig tin, with the quantities exported in 1910, also in piculs, were as follows: Shasi, 3; Changsha, 17; Hankow, 625; Wuhu, 1; Canton, 1,176; Kowloon, 147; Samshui, 6; Wuchow, 4,276; Mengtsz, 102,465; total, 108,716 piculs.

[From Consul Julian H. Arnold, Amoy.]

In regard to securing supplies of Chinese pig tin and antimony regulus, it may be stated that neither of these commodities is mined at present in this district. However, there is reason to believe that much antimony will be produced here as soon as the mines of this district are opened.

Chassis exports from Great Britain totaled 380, averaging \$1,750 each, during the first four months of this year, against 223, averaging \$2,000 each, in the 1911 period, and 146, averaging \$1,660 each, in the first four months of 1910.

MOTOR BOATS IN NEW ZEALAND.

[From Vice Consul General Henry D. Baker, on special detail.]

There are about 4,500 motor boats in use about the coast and on the lakes of New Zealand. About 3,000 of these are in the northern part of the Dominion, chiefly about the harbor of Auckland and the Hauraki Gulf and in the Bay of Plenty. About 1,500 are in use in the South Island, of which about 1,000 are in the sounds which deeply indent the north coast of the South Island between the towns of Nelson and Picton.

The demand for motor boats for navigation of the more sheltered waters of New Zealand is steadily increasing, and it would seem that notwithstanding the large number that are always being built locally, and the 20 per cent protective tariff favoring a local industry, there ought to be a good market here for American motor boats of attractive style, good power, and reasonably low price.

Prices of Engines and Boats.

Of the motor boats in the Dominion the greater number were built locally but with American engines, the largest number of engines for this purpose coming from San Francisco. The American engines are easily the favorites over all others, notwithstanding a certain amount of competition with English and local engines. Local dealers in American engines make excessive profits on their sales, usually amounting to 50 per cent or more. For instance, one engine which sells in the United States for about \$400 sells in New Zealand, excluding the duty paid, for about \$650. These engines are mostly handled by firms which either make the boats themselves and get large profits in this way also, or else arrange to have them built by other concerns which may be in the boat-building business and whose cost of construction and greater profit are usually both quite high.

Owing to high cost of labor and the profits which are exacted on each boat built, as well as on the engines, the cost of motor boats in New Zealand is unduly high, and would probably greatly restrict the use of motor boats were not their particular advantages for New Zealand very marked and were not the local population especially enthusiastic over the pleasure and convenience derived from motor boating. The average price for an ordinary cabin or raised deck motor launch in New Zealand, without the engine and with dimensions 30 by 7 by 2½ feet is \$750. If an equivalent motor launch exclusive of the engine were to be put on the market here by American motor boat manufacturers for, say, \$500 landed cost, the result in sales ought to be very satisfactory. Some motor boats sell here for much more than \$700, but the one referred to would be of rather a plain type. Some also of less dimensions are sold relatively cheaper, and it is the cheapest motor boats that have the best demand; the present tendency is to put less material and workmanship in the boats and so sell them cheaper. Of course the local motor boat builders with their relatively small output are at a decided disadvantage as compared with their American competitors, who have far better facilities for building in large numbers a cheap type of good boats.

The Boat-Building Center.

The chief center of New Zealand's motor-boat industry is Auckland, where there are about 10 establishments, capable of building

from 2 to 15 boats at a time, about two months being usually required for constructing each boat. Altogether about 50 boats are built every two months at Auckland, or about 300 boats annually. There are also establishments for building boats at several towns in the South Island, chiefly Picton and Dunedin, with a total capacity, however, of not more than about 50 boats per year.

In addition to the long coast lines of the North and South Islands of New Zealand, which have deep indentations in some parts, especially suitable for motor boating, there are also some rivers, especially the Waikato and the Wanganui in the North Island where such boats are of service, and on many of the lakes of New Zealand they have a very popular use, and in some instances are really a necessity for getting about. There are 9 lakes in the North Island having an area of 5 miles or over, and 18 lakes in the South Island with an area upward of 5 square miles each.

Many Scenic and Fishing Attractions.

Some of these lakes are frequented every year by hundreds of tourists from all parts of the world on account of their scenic attractions and the remarkable catches of fish which they offer to sportsmen. The best-known lakes are Lake Taupo, with an area of 238 square miles; Lake Rotorua, 32 square miles; and Lake Tarawera, 15 square miles, all situated within the famous volcanic and thermal springs district, and which are claimed to have the largest trout in the world. In this district there is one small lake—Rotomahana, 3 miles square—which affords a unique instance of motor boats navigating in hot water. At one edge of the lake the water is almost boiling, but tourists are taken over it in motor boats to view the famous steaming cliffs. In the eruption of Mount Tarawera in 1887 a great convulsion occurred in this lake, and the water from it boiled over into the surrounding country for many miles.

In the South Island of New Zealand there is a noted chain of cold lakes, the two leading ones being each over 100 miles square, and on these lakes motor boats are the leading means of communication and of affording pleasure and sport to tourists.

There is a very important use in New Zealand of auxiliary oil engines for sailing coasters and for hoisting cargoes, about 5-horse-power motors being most common for such purposes. Particularly about the northern coast of the North Island there are many schooners and other craft fitted with auxiliary screws driven by motors.

There are numerous boating clubs in New Zealand and the Power Boat Association, with headquarters in Auckland. There is probably no more popular form of amusement in New Zealand than the boating attractions afforded by the waters within easy access of most of the population.

Delhi Electric Tramways.

The Delhi Electric Tramways & Lighting Co. (Ltd.) has applied to the Punjab Government for an extension of the area to which it may supply electric power so as to include the Government quarter of the new capital.

The slate output last year was valued at \$5,728,019, a decrease of \$508,740 from 1910, trade conditions being somewhat unsettled.

FOREIGN TRADE OPPORTUNITIES.

(Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.)

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8884. Lumber of various kinds.**—One of the commercial agents of the Department of Commerce and Labor, reporting on the lumber markets in a certain European country, writes that there is an immediate demand for 2, 3, and 4 inch ash planks, 22 feet and longer, firsts and seconds; clear white oak logs, round or squared, peeled or unpeeled; octagon hard maple mangle stock 5 by 5 inches, 6 by 6 inches, 24 to 26 inches or multiples thereof in length; hard maple shoe-last stock 12 inches in length, turned and tapered in the rough; ash boat oars, all sizes (finished); elm hubs 6 by 6 inches, 6½ by 6½ inches, 8 inches long. Correspondence regarding this matter should be addressed to a firm whose name is given in the report.
- No. 8885. Theater and other buildings.**—The American consul general at Constantinople, Turkey, reports that announcement is made of the renovating of the Municipal Garden with the construction of a winter and summer theater and certain stores in conformity with plans. Bids will be received until June 13, 1912, when they will be opened in the presence of the bidders. Those who desire to participate in the bidding are requested to write for the (*cahier des charges*) conditions of the contract to Le Conseil de la Prefecture de la Cille, Constantinople, Turkey.
- No. 8886. Distilled alcohol.**—A business firm in Turkey has informed a commercial agent of the Department of Commerce and Labor that it desires to handle distilled alcohol of 95° or 96° proof (metric system) or 190° to 192° American system. There appears to be a good market for this product, and the report states this is a splendid opportunity for exporters of this material to do a good business. The firm is said to be strong financially and is in a good position to secure trade. Correspondence in French is preferred.
- No. 8887. Coaling stations.**—The American consul general at Ottawa, Canada, reports that the commissioners of the Transcontinental Railway have advertised for tenders, to be received until May 31, 1912, for the construction of six 200-ton mechanical coaling plants, with sand houses and track approaches, to be erected at Moncton, New Brunswick; Napadogan, New Brunswick; Edmunston, New Brunswick; Grant, Ontario; Calvert, Ontario; and Armstrong, Ontario; also for a 1,000-ton coaling station with approach at Cochrane, Ontario. Plans and specifications may be seen at the office of the mechanical engineer, Ottawa, Ontario, Canada.
- No. 8888. Steam road rollers.**—An American consul in the Far East reports that a municipality in his district contemplates the purchase of a number of various sized steam road rollers, and manufacturers are requested to send descriptive catalogues, with prices and discounts and shipping weights, to the municipality so as not to be there later than June 15. At the same time extra copies of catalogues, with prices, discounts, etc., should be sent to the consulate submitting the report for the catalogue library. It is imperative that prices be given; otherwise no action will be taken regarding the products.
- No. 8889. Cotton goods.**—Several important foreign importers and dealers in cotton goods are anxious to handle American cotton goods and would like to hear from exporters who are interested in this matter. These names are furnished by one of the commercial agents of the Department of Commerce and Labor who has personally interviewed the importers and who states that this is an excellent opportunity for American manufacturers to form good connections and secure a large share of the trade. The kinds of goods which are most widely sold are 36-inch, 3 and 3.50 yard sheetings, bleached goods, prints, gingham, duck, drills, flannels, and printed handkerchiefs of all kinds. Correspondence should be in French, but English is understood. Names of the firms referred to can be obtained from the Bureau of Manufactures.
- No. 8890. Light buggy.**—An American consul reports that a Government official in his district desires to be placed in communication with American manufacturers of light buggies. He saw one recently and thinks it is well adapted to the conditions of the country in which he is located. Firms are requested to make prices as moderate and conditions as reasonable as possible, with a view to future orders. Prices should be quoted c. i. f. port of destination. Correspondence should be addressed to the consulate, for transmission to the inquirer.

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THE GERMAN BERLIN AEROPLANE EXPOSITION.

[By Consul General A. M. Thackara, Berlin.]

An International Aeroplane Exposition, the second in Germany, was held in this city April 3 to 14, 1912, in the exhibition buildings erected in the grounds of the Zoological Gardens. It was organized under the auspices of the Imperial Automobile and Aero Clubs, and the Association of German Motor Vehicle Manufacturers, Prince Henry of Prussia, the brother of the German Emperor, being the patron. The exhibition in every way was a brilliant success. The halls were filled to their utmost capacity every day, and only the fact that the buildings were engaged for other purposes prevented the aeroplane exposition being prolonged for two weeks. The visitors were from every class of society, including many military and naval officers.

Range of Exhibits.

There were 176 exhibitors in all, divided as follows: 22 firms, companies, and individuals exhibiting aeroplanes; 18 exhibiting aeroplane motors; 6 special steel for aeroplane construction; 5 special machine tools; 41 accessories; and 84 displaying miscellaneous exhibits only indirectly connected with the aeroplane industry. Under accessories are included such articles as magnetos, radiators, ball bearings, oils, lubricators, spark plugs, etc.

There were few foreign exhibits, and these were displayed by German firms and companies who are the agents for the sale of the products in this country. Schuchardt & Schütte, of Berlin, exhibited a fine line of American tools, all in operation at their full capacity, which attracted great attention.

The Biplane Most Satisfactory in Germany.

About 27 German firms are building aeroplanes exclusively and about 24 more constructing them in addition to other products. Many of the aeroplane factories are small, but some of them represent a fairly large capital. [A review of German aeroplane factories appears on page 841 of this issue.] It is estimated that there are 400 to 500 aeroplanes in use in Germany; 214 pilots, both officers

and civilians, who may be called on for military duty, have been licensed by the German military authorities.

Of the 40 aeroplanes shown at the exposition, 30 were monoplanes, 9 biplanes, and 1 triplane. This proportion is somewhat misleading as to the relative popularity of the types, as the biplane is employed by several of the German firms that have had the most success, such as the Euler, Wright, Albatross, etc., while many of the monoplanes shown were largely experiments by unknown firms. For military purposes, at least, and in general when the greatest speed is not essential, the biplane seems to have proved the most satisfactory in Germany.

Intense Scientific Work on Aeroplanes.

In general, the designs followed closely the various French types and there was an absence of freak machines such as are generally to be seen at such expositions. Of course, a number of the aeroplanes were somewhat crude and several will probably never leave the ground, but the general principles seemed to be understood, and in the case of the well-known firms the execution and finish were good.

For the present America has little to learn from Germany in the actual design of aeroplanes, as their ideas and lines still come largely from France and America. This condition will probably not obtain much longer as, now that it is generally accepted that, with or without dirigible balloons, an army must have a fleet of fast, reliable aeroplanes, the problem is being attacked from every side by the aviator in the field and the scientist in his laboratory. It is evident from the extensive exhibit of scientific instruments for carrying on experiments of all kinds connected with the aeroplane and its accessories that the Germans intend to find out all that is possible from a laboratory point of view.

Various Types Shown.

The following brief description of a few of the most notable types of aeroplanes will give an idea of the general trend and progress:

THE ALBATROSS.

One of the finest in appearance was the Albatross military biplane, 1912 type, manufactured by the Albatroswerke, G. m. b. H., Johannisthal b. Berlin. Its upper planes, much larger than the lower, are shaped and warped much along the lines of the wings of the bird from which it takes its name. The tips are flexed by suitable wires to maintain stability. The wings are spaced and supported by diagonal, instead of vertical, braces and the usual wire ties. The body, on a level with the top planes, is of highly polished wood and is shaped like a flat-bottomed boat cut away forward. The four-cylinder 100-horsepower Argus motor is placed forward of the planes and a Chauviere propeller is bolted to the forward end of the crank shaft. The two seats are immediately behind the motor, that of the pilot being the farthest forward. A large searchlight operated by a small dynamo is fitted adjacent to the pilot's seat. The planes are impregnated with Cellon-Emallit (see later) to render them weather and oil proof and to insure smoothness. All the steel wires, etc., are weather proof, and the steering gear is nickel plated. The steering cables are duplicated throughout. The spread of the planes from tip to tip is 13.3 meters (43.6 feet), length over all 10.7 meters (35.1 feet), and supporting surface about 40 square meters (430.5 square feet). The weight of the machine empty is 480 kilos (1,058.2 pounds), and the speed 90 kilometers (55.9 miles) per hour. The running and landing gear consists of two skids to each of which a pair of wheels is attached by rubber straps. The finish and general appearance show great attention to details.

On this stand two pictures attracted much interest. The first was of a dirigible balloon surrounded by aeroplanes and evidently at their mercy; the legend was "30

Albatross cost no more than one Zeppelin." The second picture showed a battleship the sky above which is filled with aeroplanes. The words under this were "2,500 Albatross cost no more than one dreadnought."

THE EULER.

August Euler, Gallusanlage 1, Frankfurt on the Main, showed three types, one a 1911 biplane that has made a large number of flights, the most interesting of which was one of 50 kilometers (31 miles), with Prince Henry of Prussia as passenger. The second was a hydro-aero-triplane, the general construction of which is the same as that of the biplanes made by this firm, except for the floats and the small extra supporting planes placed quite low, underneath the body, in order to give extra lifting power. The single main float is immediately under the center of the machine and is designed to support all the weight on the water. A small cylindrical float, normally out of water, is placed at each extremity of the lower plane to prevent capsizing. The third aeroplane shown was the 1912 military type. The lines of the Farman construction are closely followed. The two seats for the passenger and pilot are well forward of the planes. At the rear is the 7-cylinder 100-horsepower Gnome motor. The elevating and steering planes are single instead of double, as in the last year's model. Stability is obtained by small flexible planes at the extremities of the upper main planes. The struts and ties are carefully worked out. No attempt is made to close in the seats and motor with a body, as in the Albatross and other types. This firm is the most in favor with the army, and more than half the pilot officers have received their instructions and passed their examinations on this type.

GOEDECKER.

The body of this aeroplane, made by Flugmaschinenwerke J. Goedecker, Niederwalluf a. Rhein, is of shallow troughlike shape tapering away to nothing at the rear. The 75-horsepower vertical motor is placed forward with the propeller bolted to the crank shaft. The most noticeable feature is the framework supporting the planes. It consists of three steel tubes running the length of the planes, the rods connecting the ends forming a triangle with its base upward. Numerous struts and tie wires give this construction great rigidity. The running and landing gear is made up of three wheels elastically attached but without skids. The spread of the planes is 14.5 meters (47.6 feet); length over all, 9 meters (29.5 feet); supporting surface, 35 square meters (376.7 square feet); motor, 75-horsepower; and speed, 100 kilometers (62 miles) per hour. Stability is obtained by warping the extremities of the wings.

THE LOUTZKOY 200-HORSEPOWER MONOPLANE.

The most powerful aeroplane exhibited was the Boris Loutzkoy monoplane, manufactured by Direktor Boris Loutzkoy, Victoria Louisen Pl. 1, Berlin W. 30. It is fitted with two 100-horsepower Argus motors arranged tandem in the forward part of the body, each driving an independent propeller revolving around the same hub. One propeller is driven by an extension of the crank shaft of the forward motor. The second motor is placed behind and a little below the first, so that a shaft extending forward under the first motor drives a sprocket, which is connected by a short chain to a sprocket bolted to the hub of the second propeller. With both motors working, a speed of 150 kilometers (93 miles) per hour is claimed. The machine can fly, however, with either motor alone. The weight with pilot, one passenger, and supplies for a six-hour's flight is 1,400 kilos (3,086.5 pounds). The span is 19 meters (62.3 feet), the length 15 meters (49.2 feet), and the supporting surface 52 square meters (559.72 square feet).

WRIGHT.

Two Wright aeroplanes were shown, one made by the German Wright Co. (Flugmaschine Wright Gesellschaft m. b. H., Kleiststr. 8 III, Berlin W. 62), and conforming in every way with the latest American model. The second was the historical machine with which Wright made the first flight in Germany in the fall of 1909 at the Tempelhofer field.

RUMPLER.

A great deal of attention was attracted by the Rumpler Dolphin monoplane, manufactured by the E. Rumpler Luftfahrzeugbau G. m. b. H., Siegfriedstr. 202, Berlin-Lichtenberg, which is supposed to be the last word in aeroplane luxury. The body is of boat-like form with the motor and propeller forward. Immediately behind are the two seats arranged tandem. The motor is closed in by a hood much like an automobile, and the seats, which are luxuriously upholstered in leather, are covered by a curved wooden top so that the passengers are as well protected from the weather as in a limousine car. Large celluloid windows are provided on the sides and forward for observation. The appearance is very much like that of a dolphin, from which it is named.

Display of Motors.

From a technical point of view the motors formed the most interesting part of the exposition. A great deal of study and work had been spent on the design and execution of the various types, and in some cases the results were quite satisfactory. Besides the ones on the aeroplanes, there were 41 motors exhibited by 18 different firms, 5 of which showed rotary motors. The Argus, Dixi, Daimler, and N. A. G. seemed to have attained the best results along accepted lines, while Baumbacher, with a double-piston two-cycle motor, and Oerlikon, with a double-opposed horizontal motor, showed novelties. The following brief descriptions will give an idea of the principal characteristics, while the table at the end will give the general tendencies. On the whole, it can not be said that Germany is on an equality with France, but is making great progress, and will probably be so in a few years.

THE ARGUS MOTOR.

The Argus motor, manufactured by the Argus Motoren Gesellschaft m. b. H., Flottenstr. 39/40, Berlin-Reinickendorf-Ost, has four vertical cylinders cast in pairs, water jackets integral. Both inlet and exhaust valves are on top of the cylinders set along the line of the axis of the motor and are mechanically operated by push rods and rocker arms from a single cam shaft which is inside the crank case. Carburetor and admission pipes are on one side and exhaust on the other. Crank shaft is cut from the mass, bored out for lightness, and mounted on ball bearings. Connecting rods are also cut from the mass in such a way as to get the greatest strength for the weight. Outside the forward end of the crank case are the gears for the cam shaft, magneto, and water pump, all uninclosed. On the rear end of the crank shaft is a special flange for the propeller. The rear ball bearing of the crank case is specially designed to take up the thrust or pull of the propeller. Ignition is by Bosch high-tension magneto, spark plugs being in the side just below the intake valves. The workmanship and finish are good. Various types were shown, the dimensions of which may be seen in the table on page 838.

THE DIXI.

The cylinders of the Dixi motor are cast separately with the water jackets integral. A specially large gear-driven centrifugal pump insures efficient cooling. The inlet valves are on the top of the cylinders and are operated by push rods and rocker arms from the same cam shaft as the exhaust valves which are on the sides and are operated by ordinary valve tappets. Both valves are of very large dimensions. The crank case is divided laterally into two parts, the lower part serving as an oil reservoir. Ignition is by Bosch high-tension magneto combined, in the larger types, with storage batteries for starting. The carburetor is provided with a hot-water jacket and draws the air from a heating chamber. The oil pump is inside the crank case and is driven by an eccentric from the crank shaft. The crank shaft and connecting rods are bored out to carry oil, which is pumped in large quantities, the overflow returning to the lower part of the crank case. An interesting feature of the Dixi motor is the lightness of the pistons, which are made of a hard composition of aluminum. In a test on the blocks a 100-horsepower Dixi motor was run for four hours, developing 116 horsepower all the time. The pistons showed no ill effect as a result of this trial. The Dixi was exhibited by Dixi Luftfahrt und Bootsmotoren Verkaufs Gesellschaft m. b. H., Bülowstr. 11, Berlin.

THE DAIMLER.

The highest horsepower Daimler motor is rated at 125 to 165 at from 1,100 to 1,600 revolutions per minute. It has four vertical cylinders 165 by 175 millimeters (6.50 by 6.89 inches) cast in pairs with water jacket integral. Both valves are on top of the cylinder set along the line of the axis of the motor, and are mechanically operated by push rods and rocker arms from cam shaft. Cam-shaft gears are forward and uninclosed. Oiling is by automatic drip oiler driven from gears on rear end of cam shaft. Ignition is by Bosch high-tension magneto. A decompressor is provided for starting.

The newest type produced by the Daimler company is of 65 to 75 horsepower at from 1,250 to 1,400 revolutions per minute. The four vertical cylinders, 120 by 140 millimeters (4.72 by 5.51 inches), are cast in pairs with water jackets and valves as above. The cam shaft is inclosed inside the crank case and driven by a gear mounted on the

middle of the crank shaft. The water pump, oil pump, and magneto are grouped together and driven by the same shaft. The oiling system is entirely inclosed in the crank case, the lower part of which serves as an oil reservoir. The motor is designed so as to offer the least possible resistance to the air and the result is very pleasing. The manufacturer is Daimler-Motoren Gesellschaft, Stuttgart-Unterturkheim.

THE NEUE AUTOMOBIL GESELLSCHAFT (N. A. G.) MOTOR.

The four vertical cylinders are cast separately without water jackets, which are made of copper and fitted afterwards. Valves in top of cylinders all mechanically operated by push rods and rocker arms from cam shaft inside of crank case. Admission and exhaust ports are on the same side. The crank case is cast in one piece and has an oil reservoir in the bottom. The oil is delivered in large quantities and the overflow is allowed to return to the tank after having been strained.

In the 100-horsepower and 150-horsepower types the crank case is made in two pieces. The latter model has six cylinders, but the general construction is the same except that double ignition is provided by two high-tension magnetos mounted on opposite ends of a short horizontal shaft at right angles to the crank shaft, from which it is driven by helicoidal gears. The manufacturer is Neue Automobil Gesellschaft m. b. H., Berlin-Oberschoneweide.

THE BAUMBACH TWO CYCLE.

One of the most original motors shown was the Baumbacher two-cycle double-piston type, manufactured by W. Baumbach, Leipzig-Kleinzschocher. The cylinders are cast in pairs and are each bored out to two diameters, the upper half to 110 millimeters (4.3 inches), the lower to 150 millimeters (5.9 inches). The operation is as follows: As the piston descends a certain amount of vacuum is created in the lower half of the first cylinder. When this piston reaches its lower dead center it uncovers a port connecting with the crank case. Through this port the lower part of the cylinder is filled with the gases previously admitted to the crank case. As the piston rises it compresses the gas in the lower half of the cylinder. When it reaches the top dead center the piston of the next cylinder, having just reached its bottom dead center, uncovers a port connecting the lower half of the first cylinder, in which is the compressed charge of gas, and the upper half of the second cylinder in which are the burnt gases that have just finished expanding. Just before this point in the cycle, a mechanically operated exhaust valve in the top of the second cylinder has been opened so that all the pressure in the second cylinder has escaped, and the fresh gas rushing in fills the cylinder and drives out the remaining burnt gases. The second piston then rises and compresses its charge, which is fired at the proper point. The lower half of the second cylinder supplies the gas for the upper half of the first cylinder in the same manner. The cylinders are arranged in pairs, fan fashion, and as many pairs may be used as desired. Fourteen cylinders is the largest motor that has yet been designed of this type.

It follows, of course, from the above explanation that one explosion is given for each cylinder for each revolution. The new features claimed for this motor are: First, the mechanically operated exhaust valve, which allows all pressure to escape before the inrush of the fresh gases which are under considerable pressure, thereby obtaining complete scouring and a full charge; second, owing to the fact that the gases in the crank cases are at atmospheric pressure or below, specially tight joints are unnecessary, and the crank case does not have to be divided up into as many divisions as there are cylinders, which is the case in ordinary two-cycle motors; third, freedom from scoring of the cylinder walls, due to the burnt gases passing through ports in the part of the cylinder traversed by the piston; fourth, as the exhaust valve and intake port are at opposite ends of the cylinder, no baffle plate is needed on top of the piston and the burnt and fresh gases have no tendency to mix, which insures economy. There is, of course, a certain amount of loss of energy due to the work done in compressing the fresh gas in the lower half of the cylinder and then allowing it to expand into the upper half of the next cylinder. It is claimed, however, that this loss is more than compensated by the increased efficiency of the motor.

THE BUCHERER REVOLVING MOTOR.

This motor has four air-cooled cylinders arranged in the form of a cross. At 1,200 revolutions per minute it is said to develop 52 horsepower, which is about 9 horsepower per stroke liter. The total cubic capacity of the cylinders is 5.7 liters (6 quarts). It is claimed that the Gnome motor only gives 6.9 horsepower per liter.

Remarkable results are claimed for this motor on account of its long stroke and the special patented construction of the piston and rings. The crank case is of cast aluminum reinforced by chrome nickel steel bands to take up the strains of centrifugal force. The valves, instead of being on the tops of the cylinders as in most rotary

motors, are both on the sides and mechanically operated. This permits them to open outwardly from the center following the lines of the centrifugal force and avoids the difficulty often experienced of valves not opening at high speeds, as the effect of centrifugal force is to tend to hold them closed when they are placed on the tops of the cylinders. The manufacturer is Max Bucherer, Köln-Lindenthal.

THE OERLIKON.

The Oerlikon motor is designed to reduce weight to the lowest point consistent with durability. The cylinders are cast separately and are mounted in pairs in a horizontal position on opposite sides of an open square aluminum casting. The crank-shaft ball bearings are carried by the two other sides of the square. The crank shaft is made of hollow steel tubing bent to shape. On one end is the propeller hub and a gear for driving the water and oil pumps. On the other end is the gear for driving the cam shaft, to the end of which is coupled a high-tension magneto. The valves are operated by long rods and rocker arms and are placed in the heads of the cylinders. The connecting rods are mounted on ball bearings, and together with the crank shaft are exposed to the air, as the crank case is not housed in. The advantages claimed for this motor are extreme lightness, freedom from vibration, and efficient cooling, making long runs possible without heating up. The manufacturer is Schweizerische Werkzeugmaschinenfabrik, Oerlikon, Switzerland.

TABULAR SUMMARY OF MOTOR FEATURES.

	Horse-power.	Revolutions per minute.	Number of cylinders.	Bore.	Stroke.	Weight.	Cooling.	Arrangement of cylinders.
				<i>M m.</i>	<i>M m.</i>	<i>Kilos.</i>		
Argus, Berlin.....	50	1,250	4	124	130	130	Water.	V
Do.....	70	1,250	4	124	130	115	do.	V
Do.....	100	1,250	4	140	140	132	do.	V
Baumbach-Leipzig.....	70	1,200	4	40-150	120	65	do.	V ¹
Bucherer.....	52	1,200	4	100	152	120	Air.	S
Daimler.....	45	1,200	4	110	140	120	Water.	V
Do.....	70	1,200	4	120	140	125	do.	V
Do.....	125	1,200	4	175	165	270	do.	V
Dixl.....	50	1,400	4	100	140	90	do.	V
Do.....	75	1,300	4	120	170	140	do.	V
Do.....	100	1,300	4	140	200	205	do.	V
Hilz, Düsseldorf.....	25	1,350	3	105	130	60	Air.	F
Do.....	30	1,350	3	112	130	70	Water.	F
Do.....	50	1,300	6	105	130	90	Air.	S
Do.....	120	1,300	4	150	205	120	Water.	V
Hoffmann, Frankfurt.....	70	1,000	4	110	150	85	Air.	S
Do.....	90	1,000	9	110	150	85	do.	V
N. A. G.....	56	1,000	4	118	100	95	Water.	V
Do.....	100	1,300	4	135	160	162	do.	V
Do.....	150	1,300	6	135	160	225	do.	V
Austrian Daimler.....	40	1,450	4	100	120	75	do.	V
Do.....	65	1,350	4	120	140	105	do.	V
Do.....	120	1,300	6	130	175	190	do.	V
Rheinische Aero Werke, Düsseldorf.....	25-30	1,500	3	105	130	44	Air.	F
Do.....	40-50	1,500	5	105	130	71	do.	S
Do.....	30-35	1,500	3	110	130	40	Water.	F
Do.....	50-60	1,500	5	110	130	60	do.	S
Riedl, Chemnitz.....	45-50	1,500	5	110	130	100	Air.	F
Do.....	75-90	1,500	7	110	120	125	do.	F
Do.....	100-110	1,200	7	110	160	140	do.	F
Oerlikon.....	50	1,100	4	100	200	80	Water.	(²)
Do.....	60	1,100	4	110	200	85	do.	
Delfosse, Köln.....	20-25	1,000	3	110	120	40	Air.	S
Do.....	35-40	1,000	5	110	120	60	do.	S
Do.....	50-60	1,000	7	110	140	85	do.	S
Do.....	65-75	1,000	7	120	140	95	do.	S

¹ This is a 2-cycle motor.

² The cylinders are double opposed and the crank case open.

Accessories and Specialties.

Aside from the aeroplanes and motors, several exhibits were of a certain amount of interest, such as built-up wooden tubes, Cellon Emallit, a leather propeller, and other specialties.

HOLZBANDROEHREN OR WOODEN TUBES.

This material exhibited by the System Mutter, Vertriebs Büro, Bülowstr. 73, Berlin, attracted considerable attention by its lightness and strength. It is built up of long

strips of wood cut from the tree along the hard rings that mark yearly growth and with the grain so that there are no soft spots in the strips. The tubes are generally made of four layers. The first layer is wound so as to give the desired form; the second is made up of enough strips wound parallel so as to make the pitch of the winding about 45 degrees; the third layer is the same as the second except that it is wound in the opposite direction; the fourth layer is made up of strips laid on parallel to the axis of the tube. Between each layer, as well as on the outside, is a special preparation that binds the whole together and renders it entirely water and weather proof. On account of the way in which the tube is constructed, and as it is protected from the weather, it does not warp or work. Although the ordinary cross section is round, any desired form may be given such as V, U, triangle, square, channel, etc. For very heavy work built-up sections are made. It is claimed that size for size these tubes are stronger than wood in the proportion of 45 to 13. They are, of course, far lighter. The weight of a tube 49 millimeters (1.9 inches) outside and 40 millimeters (1.6 inches) inside diameter is given at about 480 grams (1.06 pounds) per meter length.

A series of tests carried on by Prof. Bach of the Physikal Institut der Hochschule, of Stuttgart, gave the following results:

In tension a tube 50 centimeters (19.7 inches) long [$d=40$ millimeters (1.6 inches), $D=49$ millimeters (1.9 inches)] supported 2,410 kilos (5,313.1 pounds) with an elongation of 1 millimeter (0.04 inch).

In a second test a piece of the same dimensions showed an elongation of 2 millimeters (.08 inch) at 2,000 kilos (4,409.2 pounds) and 4 millimeters (0.16 inch) at 2,270 kilos (5,004.5 pounds).

In the tests for breaking with the supporting points 50 centimeters (19.7 inches) apart, the following results were obtained:

First test.		Second test.	
Weight.	Flexion.	Weight.	Flexion.
100 kilos (220.4 lbs.)...	2.5 mm. (0.10 in.)	100 kilos (220.4 lbs.).....	2.0 mm. (0.08 in.)
200 kilos (440.8 lbs.)...	5.5 mm. (.22 in.)	200 kilos (440.8 lbs.).....	4.0 mm. (.16 in.)
300 kilos (661.2 lbs.)...	9.0 mm. (.37 in.)	300 kilos (661.2 lbs.).....	5.5 mm. (.22 in.)
395 kilos (870.8 lbs.)...	14.0 mm. (.55 in.)	400 kilos (881.6 lbs.).....	7.5 mm. (.30 in.)
		490 kilos (1,080.3 lbs.)...	12.0 mm. (.47 in.)

A LEATHER PROPELLER.

A propeller that is practically indestructible was shown by the Aeroplan-Compagnie Trier, Trier. A core or frame is formed by two nickel steel bars about 12 millimeters (0.47 inch) in diameter that run from one end of the propeller to the other, nearly parallel to each other but so shaped as to give the proper curve to the blades. On these two bars are threaded strips of leather, the length of which corresponds to the width of the blade. The leather is pressed together and then shaped and finished so that it is difficult to distinguish a propeller so made from an ordinary wooden one. The finish is good and the strength must be very high owing to the steel core. Of course, any shape desired may be given the blades.

A UNIQUE RADIATOR.

A radiator that has been adopted by a number of the German aeroplane manufacturers was shown by Haegele & Zweigls, of Esslingen am Neckar. It is built up on the unit principle. Each unit has the appearance of a honeycomb-type radiator of the usual height and depth, but only wide enough to form passages for two thin sheets of water. The top and bottom of each section is attached to a pipe about 25 millimeters (1 inch) in diameter the length of which is slightly in excess of the depth of the radiator section. The axis of this pipe is slightly offset from the plane of the sections. At one end of the pipe is a male cone and at the other a female cone, so that any number of these sections can be built up one behind the other. The sections are secured by two tie rods that run through the center of the pipes at the ends of the sections. As the pipes are slightly offset, the sections are in echelon, which gives them great cooling efficiency. This form of radiator is very easily applied to the side of the body of an aeroplane or in any other position. The advantages claimed are great efficiency due to the large amount of surface fully exposed to the air, lightness on account of the thinness of the film of water that is allowed to pass, and the fact that, owing to the method of securing the units together, torsional movements of the chassis are easily taken care of and in case of accident or leaks one or more units are easily replaced.

A STEEL BODY.

The Stahlwerke Becker of Willich-Krefeld exhibited shell or body designed to protect the aviator and motor of an aeroplane from small-arm fire. It is made of specially tempered steel, 2 millimeters (0.08 inch) thick, and weighs 34 kilos (75 pounds). Its dimensions permit the housing of the motor, steering gear, and control levers as well as the seat for the aviator. In testing, about 40 shots were fired at this body from various angles at a distance of 250 meters (820.2 feet) from the regulation German Army rifle. None of the shots penetrated or caused any damage.

CELLON EMAILLIT.

Up to the last year or so canvas impregnated with rubber has been generally used for the covering of the planes of aeroplanes. This has been open to certain objections such as lack of perfect smoothness and therefore high-skin friction, inflammability due to the canvas becoming saturated with oil from the motor, etc. Cellon Emaillit, exhibited by Dr. Mittner & Co., Drennewitzstr. 26, Berlin, is designed to do away with these objections. When canvas is impregnated with Cellon Emaillit it becomes perfectly smooth and proof against all effects of water, oil, heat, and rays of the sun. The reduction in skin friction has been shown by the Eiffel's laboratory to be from 12 to 18 per cent. Another advantage claimed is that danger from fire is greatly reduced, not so much from the fireproof qualities of the product as from the fact that it is not at all affected by oil or gasoline, so that the canvas has no tendency to absorb oil. Cellon Emaillit is applied with a paint brush and dries in about an hour. In drying it causes the cloth to shrink from one-half of 1 per cent to 2 per cent, which has the advantage of further stretching the canvas on the planes and taking out any wrinkles that may be there, thus further reducing air resistance. The strength of the material is also greatly increased. According to the tests made by the Conservatory of Arts and Trades in Paris, this increase amounts in the warp to 48 per cent, and in the woof to 53 per cent, as shown by the following table:

Material.	Direction of pull.	Breadth.	Length.	Breaking point.	Strength per meter.
Cotton not treated.	Warp.	50 mm. (1.97 in.).	100 mm. (3.94 in.).	35.5 kg. (78.2 lbs.).	710 kg. (1,565.3 lbs.).
	Woof.	50 mm. (1.97 in.).	100 mm. (3.94 in.).	43.5 kg. (95.9 lbs.).	870 kg. (1,918.0 lbs.).
Cotton treated with Cellon Emaillit.	Warp.	50 mm. (1.97 in.).	100 mm. (3.94 in.).	82.5 kg. (181.7 lbs.).	1,060 kg. (2,334.9 lbs.).
	Woof.	50 mm. (1.97 in.).	100 mm. (3.94 in.).	66.5 kg. (146.6 lbs.).	1,330 kg. (2,932.1 lbs.).

With a good quality of linen impregnated with Cellon Emaillit a resistance of 1,800 to 2,200 kilos (3,968.3 to 4,850.2 pounds) per meter in width has been obtained. Cellon Emaillit can also be applied to goods already treated with rubber, with satisfactory results.

American Machine Tools.

Among the special machine tools that were exhibited as applying specially to the manufacture of motors, the American tools attracted most favorable attention. The most complete exhibit was that of Schuchardt & Schütte of Berlin. This firm also showed a series of ball bearings that are so constructed as to allow a large amount of flexing or false alignment of the shaft without setting up any undue strains in the bearings. These are especially suitable for work in aeroplanes where the alignment of shafts is exceedingly difficult.

Motor Cycles in South Africa.

It is quite the thing at Cape Town for motor cyclists to attach side cars, shaped much like bath chairs, making the machine serve as a small tractor. Consul General Guenther adds that there are a few 3-wheel motor cycle delivery carts there, but so far only side cars are used for passengers. There are now 160 motor cycles in use in Cape Town and suburbs, and 315 more in the district.

GERMAN AIRSHIP AND AEROPLANE INDUSTRIES.

[From Consul Talbot J. Albert, Brunswick.]

Nothing illustrates the astonishing progress of the age more than the rapid development of aerial navigation. The building of airships and construction of flying-machines have in Germany become full-fledged industries.

There are in Germany three established airship companies. The enthusiasm, about five years ago, of the German people over the successful trip of the Zeppelin airship from Friedrichshaven to Mainz was intense. In a few weeks \$1,500,000 was voluntarily subscribed for further development of the Zeppelin system. Of this sum over \$1,000,000 has been expended in establishing a construction company at Friedrichshaven. However, one misfortune after another has happened to the ships constructed, four being destroyed. No market for the ships built by the company either in Germany or in foreign countries has so far been established.

Airship Systems and Improvements.

The Zeppelin is known as the rigid system of airship construction. The Parseval Co., which constructs ships of the nonrigid pattern, has also met with similar difficulties. It was formed in 1907 with \$125,000 capital, which has been increased. Attention was first paid to building small airships, but the competition of the aeroplane became too great. The small airship was found inferior to the aeroplane in speed and not sufficiently superior either in endurance or in transport capacity.

The size of the airships has been increased; *Parseval III* has been constructed with a gas volume of 10,000 cubic meters, propelled by two 6-cylinder motors of 200 horsepower each. It measures 280 feet in length and 49 feet in diameter and is said to have a speed of 38½ miles an hour. On February 28 a trial trip was made from Berlin to Cologne and return. The ship carried seven passengers, 600 pounds of petrol, 3,300 pounds of benzine, and 2,200 pounds of ballast and water. This ship has been accepted by the German war office. As the nonrigid system is favored by the military authorities it has been more successful than the rigid system. The Parseval company has built ships for the Russian and Austrian armies and one is now being built for Japan.

The third airship company is Siemens & Schuckert, which utilizes the semirigid type. Large sums have been expended in developing this system of airships, which are constructed in accordance with the Gross patent. The most powerful German dirigible belongs to this type and has 480 horsepower. It is considered by many as the most successful airship constructed in this country, has a record of 45 miles an hour, and has made 45 trips without accident.

In Germany there is a steady improvement in handling and housing airships. The great difficulties experienced in leaving and in entering the halls or depots have been overcome by building them with exits at each end, or turnable by electricity. Some halls have capacity for two ships. Great improvement has been attained in emergency landing and in manipulating ships in rainy and freezing weather and in adverse winds. There are now airship halls at Berlin, Hamburg, Cologne, Frankfort on the Main, Metz, Königsberg, Thorn, Gotha,

Bitterfeld, Biesdorf, Dusseldorf, Baden-Baden, and Kiel, the last an airship naval station, while a similar one will be shortly built at Helgoland.

Aeroplane Industry.

A number of German firms are manufacturing flying machines. One of the best known is the Albatross, a \$12,500 limited liability corporation, which constructs one and two deck machines and is patronized by the military authorities. The Automobil und Aviatik Aktiengesellschaft at Muhlhausen builds one and two deck machines and has an aeroplane field at Habsheim and a branch at Johannisthal.

The Deutsche Flugzeugwerke, at Leipzig-Lindenthal, was formed with \$25,000 capital, which has been increased; it also has a branch in Johannisthal. The original inventors of the German one-deck aeroplane are Dorner & Grade, with \$25,000 capital and a trial field at Bork. The Euler company builds one, two, and three deck machines, has an aeroplane field at Frankfort on the Main, and is the only German firm which has no branch at Johannisthal.

The Wright Flugmaschinen Co., in Johannisthal, started with \$125,000 capital, subsequently raised to \$150,000. Of this sum it is said \$50,000 in cash was paid to the Wright brothers, together with \$50,000 value in shares of the company for the use of their patent rights.

The Rumpler company, with \$62,500 capital, manufactures a one-deck machine called "Taube" (dove), said to be much admired for its fine form and graceful flight.

The Luftverkehrsgesellschaft, capital \$375,000, not only manufactures aeroplanes but also conducts a pleasure excursion business with Parseval airships. All these flying-machine companies not only sell aeroplanes but give instruction in the art of flying.

Other companies are the Flugwerke Haefelin, capital \$25,000; the Harlan, which makes the Grulich one-deck machine; and Gostav Schulze, at Berg, which builds a one-deck machine.

Although prizes are continually offered for superior flights and the Government endeavors to promote the aeroplane industry, it is not in a prosperous condition. The numerous fatal accidents arising from defects in flying machines deter people from purchasing. Nevertheless, continual improvements being made in apparatus would indicate that the industry will in time be put on a sound basis.

Aeroplane Accessories—Prize Flights—Aerial Navy.

The manufacture of screws, motors, and aeroplane attachments of all kinds is not more flourishing than the main industry. The principal motor factories are the Argus, Daimler, and the Neue Automobil-Gesellschaft. Of foreign motors the most popular is the Gnome. The German automobile industry has not engaged much in the manufacture of motors for flying machines. Several large firms have given it up, because there is no prospect of a market corresponding to the expense involved.

The chief patrons of the aeroplane industry are the military and the airmen who make prize flights a business. The German aerial clubs instituted prize contests; in 1911 the value of the prizes amounted to more than \$250,000. The flights overland are very expensive, owing to the frequent failure of the motor to operate and the necessity of landing at unfavorable places with damage to the

machine. The industry is badly affected by the competition of the large number of companies engaged therein. The successful firms are chiefly those supported by the military authorities. Prosperity can only come to the industry by confidence being restored through the increased security of the apparatus.

It is said that the aerial fleet now in possession of the German War Office consists of 2 Zeppelin, 2 Gross "M" ships, and 3 Parsevals. There are privately owned in Germany 2 Zeppelins, 3 Parsevals, and 1 Gross or Siemens-Schuckert. In process of construction or reconstruction are 2 Zeppelins, 3 or 4 Parsevals, and 4 Gross.

NEW PATENT LAW IN THE NETHERLANDS.

[From Mitteilungen des Handelsvertragsvereins, Apr. 5, 1912.]

An inconvenience which caused a great deal of complaint was the fact that in Netherlands formerly it was impossible to obtain patent protection for inventions, owing to the absence of legal provisions for the granting of patents. Fortunately this has been changed by the Dutch patent law of November 7, 1910. [This law will probably be in effect by June 1, 1912.—Patent and Trade-mark Review.]

According to the "Confectionär" patents are granted in Netherlands for a period of 15 years. There are annual charges, amounting in the first three years to 50 florins (florin=\$0.402) annually; in the three following years, 70 florins annually; from the seventh to the ninth years, 90 florins annually; from the tenth to the twelfth years, 110 florins annually; and in the last three years of the period, 130 florins annually—the charges for the whole 15 years amounting, accordingly, to 1,350 florins (\$542.70). The payment of the annual charges is due on the date of the announcement, and part payment of the charges must be made before the day when the charges are due. The patent must be worked within a period of five years from the date of the announcement of the patent. [An English translation of the patent law is on file in the Bureau of Manufactures.]

BRITISH FOREIGN TRADE IN APRIL.

[From Consul General John L. Griffiths, London.]

The effect of the coal strike is shown in the trade returns of the United Kingdom for April. The strike did not end until the middle of the month. In view of the demoralization of the transport services, the number of factories that were closed on account of the labor troubles or which were operated on short time, and the great numbers of working people who were thrown out of employment, it is indeed surprising that the level of trade was so well maintained. A noticeable feature of the trade for April was the very marked increase in the imports of cheap raw materials, which is considered, of course, as meaning increased activity in British shops and factories. Imports aggregated \$294,008,342, an increase of \$41,677,324 over April, 1911, while the \$160,045,203 exports showed a decrease of \$13,652,133, of which coal, coke, and manufactured fuel accounted for \$8,944,928.

The Montreal Board of Trade favors granting civic charters to autobus lines.

FACTORS IN FOREIGN TRADE.

[From Consul Felix S. S. Johnson, Kingston, Ontario, Canada.]

Usefulness of the Translation Bureau.

Nowadays, when nations great and small are engaged in the struggle of commerce, a lack of acquaintance with foreign languages and customs is being recognized as one of the chief drawbacks to development and progress. The time may come when a universal commercial language will be adopted, and business customs will harmonize, one nation with another; but until such time, the ability to translate readily and correctly will be found to be a money-making asset in any commercial or financial house.

Many mistakes, sometimes merely humorous but quite frequently very costly, have been committed in the past by firms content to leave the translation of a foreign business letter to anyone in the office professing a knowledge of the language involved. Unfortunately for the amateur translator, there is a considerable difference between, say, the French of the evening classes and that spoken and written by the commercial men of France. This is why the casual translator, who is quite capable of an intelligent reading of a French novel, sometimes makes errors in the translation of a business epistle which causes more than annoyance.

The wide development of business has brought into the commercial arena countries whose tongues are unfamiliar to the ordinary man. The translation bureau, when adequately equipped, saves the business house all trouble in handling such foreign correspondence. There are in London several bureaus which boast that their translators can correctly render into English the language of any country that is, so to speak, within the pale of civilization. The translators are highly accomplished men, each specializing in a particular branch of the language spoken by the races of the commercial world. They are, moreover, men who have mastered the principles underlying the trade practices and regulations of the countries with whose language they have such intimate acquaintance, and are therefore competent not merely to translate but to make perfectly clear any points which might baffle a university professor who possessed their linguistic ability but who lacked their knowledge of commercial procedure.

The time is coming when the United States will be in the vortex of international trade, and if the business is to be done direct, without the intervention of other countries better equipped, Americans must give heed to this very important question. The establishment of bureaus now probably would not pay in dollars and cents, but their inauguration and maintenance might well be undertaken preparatory to the assumption by the United States of a high place in the international commerce of the world.

[From Vice Consul General Charles Lyon Chandler, Callao, Peru.]

How Commercial Bodies May Help.

One of the most interesting results of the consular reform that has taken place since 1906 has been the increasing efficiency of the various agencies, whether official or private, in the United States for promoting foreign trade. The efforts of private parties have been either collective or individual. States, counties, and cities have established or increased the usefulness of their boards of trade or chambers of

commerce; special industries have issued "bluebooks" or directories; and individuals write to consuls letters more specific and practical than formerly, as well as showing a wider knowledge of export requirements.

As it was not until 1911 that any national organization of American chambers of commerce was seriously attempted, it is too soon to expect any national business directory or similar publication, the field for which is at present fairly well supplied by private publications and directories of the larger industries. There are, however, many active boards of trade and chambers of commerce in cities throughout the United States whose literature is not sent to consulates. Only two such magazines are received at this consulate general; only four trade directories published by chambers of commerce are on file here. At other offices where the writer has been stationed there were none at all. For a nation of 94,000,000 people that is singularly little legitimate advertising. Even the State boards of promotion or similar State offices send out very little useful literature.

Many chambers of commerce are divided into sections. Perhaps there is a market for the goods of only one section abroad generally or in some particular country. This should be taken advantage of to avoid useless duplication and wasted effort. Chambers of commerce should, whenever possible, issue literature in foreign languages, especially in Spanish. This will not merely lead to a closer cooperation with similar bodies in the 22 Spanish-speaking countries, but will obviously benefit them in other ways.

[From Consul James W. Johnson, Corinto, Nicaragua.]

Style of Business Correspondence.

A matter which deserves more attention than is given to it by American exporters is the style of their business correspondence.

There is current in the United States among many business men a style of correspondence which is brief and, at times, abbreviated; which uses the simplest and most direct language, cuts out all unnecessary words, does away with all superfluous expressions, and economizes time to the fullest extent. Letters written in such a style are, perhaps, indicative of modern and energetic methods on the part of the firm using it, but to foreigners, and especially to Latin Americans, such letters appear curt and often convey an impression of rudeness. The merchant of Spanish America, in accordance with the genius of his native language, couches even his business letters in courteous terms, and this he expects from others; the effect can be imagined of receiving a letter in which the writer has not even taken the time to put in the personal pronouns.

It is noticeable that European manufacturers generally in writing to merchants here take the time to send out carefully and politely worded letters; it is certain that American exporters should not use less care or go to less trouble than do their Continental competitors.

Surface combustion.—The lectures on "surface combustion" delivered in several American cities last fall by Prof. William A. Bone, of Leeds University, have been published in pamphlet form and a copy has been forwarded by Consul Benjamin F. Chase, of that English city. This booklet, which is illustrated, will be loaned upon request by the Bureau of Manufactures.

THE TRANSVAAL GOLD OUTPUT.

[From Consul Edwin N. Gunsaulus, Johannesburg.]

The Transvaal gold output in 1911 constitutes another record, showing an increase in value over the previous year of \$14,550,375, the increase in fine ounces being 703,880. The total output for 1911 reached the enormous value of \$170,286,718, of which the Witwatersrand mines produced \$163,239,341. From the total output \$37,779,057 in dividends were distributed.

Ore milled at the mines of the Witwatersrand reached 23,888,258 tons; analysis recovery value, \$6.79 per ton, compared with \$6.93 for 1910 and \$7.04 for 1909. Among the ascribed reasons for this decrease in grade value are the inclusion of payable lower-grade rock, the disorganization caused by native labor shortage, which, in addition to reducing the amount of waste rock sorted out, induces the tendency to work for the moment rather the wider, and consequently the poorer, stopes more suitable for the ordinary type of machine drill, in order that adequate tonnage may be obtained for the mills. The excuse for this course is that idle stamps consume their share of the standing charges.

The average working costs on the Rand gold mines for 1911 are given as \$4.38 per ton, including cost of development, as compared with \$4.28 for 1910 and \$4.16 for 1909. Approximately \$35,000,000 was paid on the Witwatersrand mines during the year in wages, not including about \$5,000,000 in salaries. Administration charges reached \$3,000,000, while it is estimated that fully \$40,000,000 was paid out for colored workers' wages, recruiting fees, food, and native general charges. About \$50,000,000 were also spent in general stores for the mines.

The total number of stamps in operation on the gold mines of the Transvaal in December, 1911, was 10,195, an increase of 420 in 12 months; tube mills in operation, 251, an increase of 61.

It is estimated that the gold output of the Transvaal for 1911 constitutes almost if not quite 38 per cent of the world's output for that period, as against 33 per cent in 1910.

INSURANCE COMPANY GUARANTIES IN PANAMA.

[From American Minister H. Percival Dodge, Panama.]

Decrees supplementing the one mentioned in Daily Consular and Trade Reports on February 28, relative to the guaranties to be deposited by life and fire insurance companies doing business in Panama contain the following provisions regarding such deposits:

Resolved, The National Government guarantees the return within the terms of law 38 of 1911 of the deposits made with the national bank by the insurance companies which establish themselves or desire to continue their business in the Republic of Panama.

Resolved, The investment of the deposits which the insurance companies shall make in the national bank in accordance with law 38 of 1911 shall be subject to the following regulations: (1) Every loan which shall be made with these deposits shall require the approval of the board of directors; (2) in no case and for no cause may a person or company be given a greater sum than 5,000 balboas (\$5,000) at an annual rate of interest of not less than 9 per cent and for a term not to exceed six months, which may be prolonged for similar terms through the approval of the board of directors; (3) such investments shall be made with the greatest possible security, whether they are made on personal bonds or mortgages; and (4) a special account shall be kept of these deposits.

HIGH VALUE OF WASTE METALS.

[Announcement of Geological Survey.]

The value of secondary metals (those recovered from scrap metal, sweepings, skimmings, drosses, etc.) last year in the United States was \$52,585,390.

Though junk collectors and dealers pay low prices for small quantities of scrap metals, the competition for the scrap, drosses, skimmings, and other waste products of large users of metals is very active. It is necessary for some uses to employ primary or virgin pig metal, but as a general rule secondary metals, in whole or in part, can be used by manufacturers. As they are frequently sold at slightly lower price than the primary metals, they are in active demand and displace an equivalent quantity of primary metal.

The production of secondary metals in 1911 was: Secondary copper, 50,845 tons, worth \$12,711,250; remelted brass, \$16,814,400; lead, 54,254 tons, \$4,882,860; spelter and zinc, 47,937 tons, \$5,464,800; tin, 14,706 tons, \$12,353,040; antimony, \$359,040.

Recovery of Tin an Important Source of Supply.

As the production of tin from ore mined in the United States in 1911 was confined to a small amount of metal smelted in Texas and to the shipment of a small yield of tin concentrates from Alaska, the secondary recoveries of tin form the most important domestic source of supply.

The 7,749 tons of recovered tin includes the tin content of products made by several plants from tin scrap. These included some tin oxide, putty powders, etc., but were mainly tin chloride, two forms of which are handled commercially—stannic and stannous salts. Stannic chloride is usually sold either as a water solution, called bichloride of tin, or as an anhydrous sirupy liquid, termed tetrachloride of tin, and is used principally in the silk industry. Stannous chloride is sold in crystals and is used in dyeing and calico printing.

The largest recoveries of tin were made from the scruff and drosses that occur in making tin andterne plate. Practically no clean scrap tin plate is wasted. A large quantity of tin was recovered as tin powder by electrolytic treatment and sold to secondary smelters. Lesser sources of recovered tin reported in 1911 were tin foil, block-tin pipe, and old tin cans. The tin recovered from these sources was relatively small. Old tin cans were used even less than in previous years. The small percentage of tin coating, the varied nature of the used contents, the bulk and cost of collection and shipment, and the difficulty of disposing of the old black plate appear to be serious obstacles to their use. To recover the vast quantity of tin wasted on used tin-coated containers would be a conservation much needed and desired, but it is evident that such material must be capable of very cheap treatment when it is considered that the original clean tin plate usually has not more than 2 per cent tin coating.

TOBACCO SALES IN AMSTERDAM.

[From Consul Frank W. Mahlin.]

From a report published by an Amsterdam broker comparing the first five tobacco auctions of 1911 and 1912, crops 1910 and 1911, it appears that the prices of the Dutch East India tobacco were much higher for the Sumatra product this year than in 1911, and for the Borneo product they were lower. This is owing to the better quality of the Sumatra tobacco, together with a greater demand, while the Borneo tobacco was of inferior quality, bad color, and bad assortment.

At the five auctions for 1912 held up to May 3 in this city, 82,433 bales of Sumatra tobacco were sold at an average price of \$0.92 per pound, against 73,476 packages at an average of \$0.79 in 1911. Of the Borneo product, 1,369 packages were sold at an average of \$0.65 a pound, against 3,407 packages at an average of \$0.82 in 1911.

Panama sugar.—Consul General Alban G. Snyder notes in the Panama press the statement that samples of the first attempt at sugar manufacture at Pese, Los Santos Province, show the product to be high-grade muscovado, needing little refining.

PROPOSED ALTERATIONS FOR LONDON WOOL SALES.

[From Consul Augustus E. Ingram, Bradford, England.]

During the last wool sales in London a meeting of the Colonial Wool Buyers' Association was held to consider certain proposed changes in regulations governing London wool sales. These changes related to the method of selling "star" lots, the extension of the limit for farthing bids, and the privilege extended to the "last buyer." According to the Yorkshire Observer the details of these matters are as follows:

"Star" lots are lots of 3 bales and under and damaged wool. Such lots are marked in the catalogue with a star, and are not offered until all the big lots have been disposed of. It is proposed, as a convenience to buyers of these wools, that "star" lots shall be sold in another room concurrently with the principal sale. This is already the practice in the Australian markets, where it has been found to work very well, and at Sydney and Brisbane the limit for "star" lots has already been raised to 5 bales. The brokers apparently object to the expense of providing another auctioneer, though this could be avoided on days when the catalogues included the offerings of two or more brokers by the selling being so arranged that the broker who was first on the list for the big lots should be last on the list of "star" lots.

Farthing bids may not be made in London after 8d. (16 cents) has been reached. In all the Australian markets, and also in New Zealand, bids are accepted without any limit. The majority of the buyers in London are said to favor raising the limit for farthing bids up to 10d. (20 cents), while some desire 1s. (24 cents). The limit of 8d. was established 24 years ago, when wools were about 2d. (4 cents) per pound less in value as compared with to-day's rates, and hence it is urged that what was right at 8d. in 1888 represented 10d. to-day.

The "last buyer" privilege is that when a number of bids are made at the same price and there is no advance, the buyer of the last lot has the privilege of taking the wool. It is claimed not only that this rule leads to dilatoriness, since the last buyer naturally hangs back to be sure that all the others have finished before he makes his bid, but also that the last buyer, when he does not want a lot himself, may claim it for a friend to the exclusion of other bidders who were beforehand both with the nominal and the actual purchaser.

The London Selling Brokers' Association on receipt of these recommendations replied adversely, and it is accordingly expected that at the next London sales in July interesting developments may be expected.

SHIPPING TO THE FAR EAST.

[From an address by Luis Jackson, industrial commissioner, Erie Railroad, before the Chamber of Commerce, Meadville, Pa.]

A practical insight into our export trade was given me recently on a visit to Australia and New Zealand. We were doing an increasing business with Australia. This business was all at once checked. Australia does not require our grain and live-stock products, but it is importing all the higher classes of goods, such as are manufactured in our Eastern States—electric appliances, telephone material, street railway equipment, cotton underwear, machinery, tools, etc.

Through rates were formerly made from manufacturing points in New York and other Eastern States to Australia, New Zealand, Japan, and China. These rates included transportation by railroad across the continent to the Pacific coast and thence by steamer to the foreign ports. These rates were withdrawn, and our business has in many instances fallen off and in others not made the progress it should.

As the result of the withdrawal of these rates, Australia, Japan, and China are now taking some goods via steamers from New York around Cape Horn; and this takes as long as the direct routes from England and Germany via the Suez Canal, so that time is no longer saved, and they are again giving to European manufacturers a great deal of the business we had worked up. Australia, Japan, and China have to order goods many months ahead. I found that in Australia merchants have to keep about four times the stock that an American merchant would keep. Our trans-continental and ocean route, making better time, would enable them to keep less stock on hand and would therefore be an inducement to buy from us.

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TASMANIAN TRADE AND INDUSTRIAL CONDITIONS.

[By Consul Henry D. Baker, Hobart.]

The island of Tasmania, generally speaking, showed fair progress in 1911, notwithstanding serious labor troubles, depression in the mining industry, and heavy losses in potato growing caused by the blight.

Hobart has had the benefit of a steadily expanding export trade in apples, the southern part of the State, especially in the valleys of the Derwent and Hoon Rivers, having become one of the leading orchard districts of the world. Increased attention to dairying near the northwest coast has been a great help to that part of the island. In the mining districts of the west coast, however, conditions were unsatisfactory, due mainly to the strike of the miners at Queenstown, which prevented for over three months operations at the mines, which are among the foremost copper producers of Australia. A number of the miners moved to other States, and there appears to be a shortage of labor to properly operate the mines.

The crops of cereals during 1911 were disappointing in most districts, owing to the prolonged wet weather during the winter and early spring, which so chilled the land in many localities that the seed rotted in the ground. Prices for farm produce were better than in many previous years. Sheep and other stock did well, and good prices were realized for wool.

Shipments of Tasmanian Apples.

As a fruit-producing State, Tasmania is constantly gaining in importance, the chief market being England, though large shipments are also made to Germany, Sweden, Denmark, South American ports, New Zealand, and the mainland of Australia, and during 1911 a trial shipment of about 30,000 cases was delivered at New York. The 1911 apple season saw the record exportation to the United Kingdom of 719,311 cases, an increase of 33 per cent over the 1910 shipments, while a considerable advance was also made in the export to South American ports. Trade with New Zealand was not quite equal to the 1910 season. The larger exports to Great Britain and South America naturally reduced the available quantity for the Commonwealth, with the result that the fruit sold locally realized much better prices than

the exported product. While the average prices of the exports to Great Britain for the season were good the growers did not realize nearly so well on the latter shipments of apples as those exported early in the season, when Tasmanian apples brought the best prices realized within the last 10 years. The season for shipping apples to England and Europe begins near the end of February and last year extended to the end of May. During last season 32 ships called at Hobart for fruit for export. The apples are kept at a temperature of 33 to 34 degrees during the voyage.

The experimental shipment to New York last year met with disappointing results. The apples were shipped via England, and during transit across the Atlantic were damaged by frost, which conditions were made worse by unusual heat prevailing in New York at the time of their arrival. The local fruit growers are still hoping to eventually find a good market in the United States for their apples during the American spring and early summer, corresponding to the Tasmanian autumn and early winter. A representative of the Tasmanian fruit growers who recently visited the United States stated that in his opinion a good trade might be worked up in time, but advised that to cater for the American market growers should strive to attain good color as well as good flavor for their apples, pack them more attractively, and perfect shipping arrangements so that the fruit would not be damaged in transit.

Returns from the Fruit Industry—Jam Manufacture.

The total value of the different kinds of fruit produced in Tasmania during 1911 was approximately \$1,537,000, being second only to wool as a leading element in the local production of wealth, the value of the wool produced being about \$2,000,000. The fruit industry, however, gives employment to a far greater number of persons than does the sheep industry.

Many districts of Tasmania, covered with thick scrub and previously supposed to be scarcely fitted even for sheep, are now being planted in orchards, as it has been found that in most cases the soil that is the poorest for agriculture is often the best for growing apples. On the Tamar River, in northern Tasmania, there is a rapid increase in the utilization of land for orchards, and probably within two or three years steamers will call near the mouth of this river for apples for direct export to England.

Connected closely with the fruit industry is the local manufacture of jam, which employs nearly 1,000 persons, with an annual output valued at about \$1,220,000. The output of pears, apricots, plums, strawberries, and raspberries is large, but with the exception of pears, which are exported to other Australian states and to England, these fruits are used mostly for jam making.

Market for Spraying and Fruit-Packing Machines.

The prosperity of the fruit industry of Tasmania depends chiefly for continued success on spraying to check the ravages of the codling moth, and there ought, therefore, to be an increasing market here for American spraying machines and motors for driving them, and also for American arsenic or lead preparations. It is also found necessary to spray the potato vine to prevent destruction from blight.

The Tasmanian apples and pears are wrapped in paper and packed by hand for exportation, and if an American machine could be intro-

duced here which could effect saving in this direction it should meet with extensive sale. There is also need of a cheaper method of cutting and printing paper for apple wrappers. The Parliament of the Commonwealth of Australia in December, 1911, placed wrapping paper for fruit on the free list. This paper is now imported mostly from Sweden.

Output of Butter and Cheese.

The dairy industry of Tasmania is rapidly assuming greater proportions and ought to receive the attention of American manufacturers of cream separators and other dairy appliances and machinery. There are about 53,000 cows kept in this island for dairy purposes. The total output of the registered factories during the year ended June 30, 1911, was 2,815,680 pounds of butter, valued at \$611,719, and 423,920 pounds of cheese, valued at \$51,487. The chief export market for Tasmanian cheese and butter is England, such shipments being by way of Melbourne, where they are received and examined at the Victorian Government's cold storage. During the year ended June 30, 1911, the Government cold storage at Melbourne handled 1,439,760 pounds of Tasmanian butter for export to England, valued at about \$321,375. Several new up-to-date butter factories have been erected during the past year, one at Burnie and one at Wynyard, while another is now in course of erection at Scotsdale, and still other factories are being contemplated for the towns of Riana, Devonport, and Baden, all near the north coast. These new factories have full equipment of modern machinery, including mechanical refrigeration and artificial gravitation systems, the cream first being conveyed by elevators to the tops of buildings. The Director of Agriculture of Tasmania, in his recent report to Parliament regarding the prospects of the Tasmanian dairy industry, said in part:

Few parts of the world are so eminently adapted for dairying as Tasmania, as not only is the climate the most favorable of any of the Australian States, but the absence of droughts, the magnificent water supply, and the high feeding value of the grass and other fodder crops are such that the highest quality dairy products can be obtained. This is shown by the fact that according to the information supplied by the representative of one of the largest butter firms of London (who recently visited Tasmania) over 95 per cent of the butter exported from Tasmania during the 1910-11 season was graded first class, a much higher percentage than that gained by any other Australian State, and only some 3 per cent below the New Zealand product, which turns out 98 per cent of first-class butter and which as a consequence realizes a higher price on the London market than that obtained by any other Australian State—a price that the excellence of the Tasmanian produce will be entitled to once its output is in a position to be sold as a Tasmanian instead of an Australian product.

Crop and Live-Stock Statistics.

The estimated yield of the principal crops of Tasmania in 1911, as compared with 1910, showed a large gain for wheat, turnips, hops, and pears, but a decline in the production of other leading crops. The best crop of the year was grass, for which, however, no statistics are available. The unusual rainfall of the winter and spring spoiled the early crops of oats and wheat in the northern part of the island, but some especially heavy crops of wheat were harvested in the southern part of the State, so that the average for the year much exceeded that of late years. An especially profitable crop was hops, which brought unusually good prices. Tasmania is the chief hop-producing State of the Commonwealth of Australia and is depended upon by leading brewers, especially during recent months when it has been difficult to import hops

on account of shortage in other countries. The output of the chief crops was as follows for 1910 and 1911:

Crops.	1910	1911	Crops.	1910	1911
Wheat.....bushels..	793,660	1,120,744	Hops.....pounds..	1,160,176	1,775,266
Oats.....do.....	2,347,584	2,063,303	Apples.....bushels..	1,480,107	1,347,952
Barley.....do.....	135,654	142,318	Pears.....do.....	94,865	115,954
Potatoes.....tons.....	73,862	70,090	Hay.....tons.....	118,746	115,190
Turnips.....do.....	36,056	48,463			

The estimated number of live stock in 1911 was as follows: Horses, 41,388; horned cattle, 201,854; sheep, including lambs, 1,788,310; pigs, 63,715. All these figures represent gains over the preceding year.

The Wool Sales.

At the annual wool sales at Hobart and Launceston early in January of 1911 and 1912 prices were quite remunerative to sheep owners, although not nearly so high as in 1910, which was a record year for prosperity to pastoral interests. At the 1911 sales about 12,000 bales were offered at Hobart and 4,000 bales at Launceston, the quantity showing some slight decrease, although the quality was rather better than usual, especially for merinos. Prices ruled on a level with the mainland market and showed an average decline of about 12 per cent on the previous season. There was good competition, however, for high-class merinos, which nearly all went to the continent of Europe. American competition was weak, as several leading buyers had their orders withdrawn and limits reduced. Several lots of first supermerino realized 32 cents per pound, while the highest price for crossbreds was 27 cents per pound. At the sales early in 1912 the aggregate prices were about 1 cent per pound lower than at the sales in 1911, but as the clip was heavier, containing more grease and dust, the wool appears to have really represented better values than in 1911. Most of the merinos at the recent sales were purchased for the continent of Europe, while the top lots of crossbreds were taken principally for the United States. The merino sheep of Tasmania are especially noted for the firmness and silkiness of their fleece, which is sought by Continental buyers for the manufacture of mercerized silk and superquality underwear; but as this wool also possesses a high percentage of grease, it is not in demand by American buyers, who bid here chiefly for light clean fleeces which will pay the least duty per pound on entering the United States.

Output of Minerals.

The mineral production of Tasmania showed another serious shrinkage in 1911, the total figures for the year being \$6,612,322, against \$6,996,763 for 1910, \$7,706,691 for 1909, and \$8,017,847 for 1908. The following statement shows the value of the production of the different kinds of minerals for 1910 and 1911:

Minerals.	1910	1911	Minerals.	1910	1911
Gold.....	\$765,841	\$642,903	Shale.....	\$1,041	\$1,216
Silver-lead ore.....	1,204,828	1,232,981	Wolfram.....	35,428	37,806
Blister copper.....	2,695,174	1,877,481	Bismuth.....	20,677	28,020
Copper and copper ore.....	63,994	111,209	Osmiridium.....	2,579	9,187
Tin ore.....	1,943,646	2,498,947	Total.....	6,996,763	6,612,322
Coal.....	263,555	172,570			

The strike at the copper mine resulted in the decrease in the output of this product. The Zeehan smelters, after being closed for months, resumed operations in July of last year, arrangements having been made with two leading mines for the supply of 80,000 tons of ore during the next two years. The last session of Parliament decided to pay the company owning these smelters a monthly subsidy of \$1,420 during the next two years for every month during which the company shall have smelted or purchased for smelting at least 2,000 tons of ore. The production of silver-lead ore has just about doubled since the reopening of these smelters.

Tin and Gold Deposits.

The production of tin was greatly favored by increased rainfall, and during the year the price was unusually high, averaging about \$1,000 per ton. The largest individual producer of tin is one mine situated in the northwestern part of the island. During the year some apparently valuable tin deposits were opened up at the X River near the railway line between Burnie and Zeehan. Some Tasmanian capitalists who had been successful with mining properties in their own country lately made important investments in Siam, where the Tongah Harbor Tin Dredging Co. was organized, the majority of the shares being held in Tasmania. This company had a prosperous year and expected to distribute \$185,000 among its shareholders.

The bulk of the gold mined in Tasmania comes from Beaconsfield, on the Tamar River, near Launceston. This is an exceedingly rich mine, but on account of the great cost of pumping out water, some of the largest pumps in the world being used, the net profits in recent years have been small, and last year there was a slight loss, suggesting the possibility that unless the mine can be more economically worked it may have to be closed. A new metal, osmiridium, has lately been discovered and mined in Tasmania, and the output, for which there is a good demand at nearly \$35 per ounce, promises to show much increase in the future.

Development of Resources—Shale Oil Industry.

The sum of about \$27,500 was recently voted by Parliament for the cutting of tracks, with the object of opening up mineral areas to prospectors. It is anticipated that there may be some development of the iron resources of Tasmania in connection with the cheap water-power development now under way at the Shannon and Ouse Rivers, near the central part of the State.

The shale and oil works near the town of Latrobe, from which much profit had been expected, were closed down during the year, on account of difficulties arising in the treatment of the shale.

Foreign Trade of the Island.

The total direct over-sea imports into Tasmania in 1911 from foreign countries were valued at \$3,996,053, against \$4,044,893 in 1910, and exports \$3,042,579 and \$2,489,509 for the two years, respectively. The greater part of Tasmania's import trade, however, is carried on through firms and agencies at Melbourne and Sydney, thus credited to the States of Victoria and New South Wales, and therefore the statistics of over-sea trade for this State do not accurately indicate the trend of commerce with foreign countries.

Owing to a recent agreement between the different States of the Commonwealth of Australia and the Commonwealth Government,

whereby in the future the States are to receive from the Commonwealth Government a share of the revenue collected from customs duties on a per capita of population basis, instead of on the basis of the actual duties collected on their imports, it was decided to be no longer necessary to keep any record of interstate transfers of goods from over-sea countries; hence it will be quite impossible in the future to present any reliable returns indicating the foreign trade of any particular State of the Commonwealth, any more than it would be possible to show by customhouse statistics the amount of the imports or exports of any particular State in the United States.

American Goods on the Market.

The imports of American goods shipped direct into Tasmanian ports and not purchased or transferred through other States of the Commonwealth amounted to \$364,967 in 1911, against \$403,184 in 1910. This apparent decrease occurred mostly in agricultural implements, reapers, binders and mowers, and manufactured metals, and seems to have been due mostly to bad crop conditions in some grain-producing districts, also to overimportation the previous year, and also because some dealers have found it more convenient to enter such goods through Melbourne and transship them to Launceston for distribution through the northern part of the island, where they are most wanted, than to import direct and to enter them by Tasmanian customhouses. The following table shows the articles imported direct from the United States in 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Apparel.....	\$5,036	\$4,462	Metals, manufactured.....	\$51,784	\$20,468
Arms.....	1,946	2,292	Nails.....	1,333	.....
Agricultural implements.....	29,641	21,252	Pipes, iron.....	1,036	7,830
Ax handles.....	7,494	4,418	Plated ware.....	3,017	3,134
Books, printed.....	2,321	1,751	Paints.....	8,625	7,221
Boots.....	1,800	1,309	Paper manufactures.....	17,998	10,910
Cartridges.....	3,971	2,627	Paperhangings.....	2,788	1,445
Clocks.....	3,145	4,710	Perfumery.....	1,231	1,610
Cream separators.....	6,049	6,306	Piece goods.....	5,148	10,059
Electric materials.....	2,513	4,501	Reapers, binders, mowers.....	22,478	6,676
Engines.....	5,100	7,270	Stationery.....	1,518	1,800
Fancy goods.....	3,450	1,713	Tools, hand and machine.....	16,307	24,814
Fish, preserved.....	9,226	11,227	Timber.....	10,650	2,652
Furniture.....	4,034	5,182	Tobacco.....	42,489	25,943
Galvanized iron.....	4,156	3,786	Varnishes.....	1,289	.....
Glassware.....	1,761	1,469	Vehicles and parts.....	19,962	34,956
India-rubber goods.....	3,129	5,508	Wire.....	6,073	11,723
Instruments, musical.....	2,627	861	All other articles.....	57,861	64,195
Lamp ware.....	1,503	2,277			
Machinery.....	28,863	33,320	Total.....	403,184	364,967
Medicines.....	3,932	3,289			

The above figures are of value as indicating the kind of goods required from the United States for consumption in Tasmania, but the amounts doubtless fall far short of showing the actual quantity and value of goods imported from the United States, owing to the large trade carried on through Melbourne and Sydney. This is especially true now that Tasmanian importers are no longer impelled by the desire to have imports entered at local customhouses and thus credited to the revenues of their own State, and so will now most likely enter them at customhouses in the first ports of arrival in Australia.

American Motor Cars—Market for Electrical Goods.

The most significant recent gain in imports from the United States has been in motor cars, of the moderately priced kind, the use of

which in Tasmania is showing rapid increase. American motor cars have captured the Tasmanian market and have become popular with commercial travelers, doctors, station owners, etc., enabling, as they do, a quick means of transport over long distances of thinly settled country, where railroad facilities are either entirely absent or afford only slow and infrequent means of communication. There is now a daily service of American motor cars carrying passengers between the two chief towns of Tasmania—Hobart and Launceston—120 miles apart, in successful competition with the Government railway.

By the 1st of January of next year, Hobart and small near-by towns will be supplied with cheap electric current for lighting and power purposes derived from the water-power resources, and this ought to stimulate a demand for electrical materials and apparatus, of which American manufacturers might take advantage. The city of Launceston, which now has a limited supply of cheap electric power, will doubtless have larger supplies available in the near future, and it seems only a matter of time when probably most of the towns of Tasmania will be electrically developed. The estimated cost of providing the electricity contemplated and of erecting some metallurgical works in connection therewith is \$1,200,000. The company expects later on to use the electric power not only for the treatment of complex Australian ores, but also for the manufacture of calcium carbide, calcium cyanide, etc.

Establishing American Agencies—Exports to United States.

This consulate receives many letters from American manufacturers asking for lists of desirable agents to represent their particular lines of goods. Unfortunately, nearly all of the leading firms of this island are already committed to agencies for any lines they care to handle, so it is becoming difficult for American manufacturers who desire to enter this field with their goods to find suitable agents, and increased inducements to secure agents may only tend to unsettle the loyalty of such firms to American manufacturers for whom they may be already acting as agents. It is suggested, therefore, that American manufacturers who may not be able to find from the lists supplied from this consulate, or in the World Trade Directory, firms in a position to represent them might send a representative here, possibly in cooperation with other American firms, for the establishment of selling agencies in this and other States in the Commonwealth.

The value of the articles invoiced through the American consulate at Hobart to the United States was about double that of 1910, and about three times the value of the 1909 shipments. This increase was due principally to the direct trade in timber, known locally as stringy bark, and shipped to California for use mostly for railway ties. Local timber merchants are hopeful of an important growth in these exports. The total exports to the United States last year were valued at \$170,438, made up as follows: Timber, \$95,008; apples, \$56,713; wool, \$17,737; and shell necklaces, \$980. There was \$3,009 worth of jam shipped to Hawaii, against \$2,169 worth in 1910.

Need of Shipping Facilities with United States.

It is anticipated that after the opening of the Panama Canal there may be better steamship service with the eastern coast of the United States, that Tasmanian wool, apples, and timber may be shipped direct, and that the vessels return with American produce. At

present all Tasmanian wool reaches the United States via England, and the returning ships bring back mostly English goods. One of the greatest difficulties of trade at present between the United States and Australia is that the Eastern States of the United States, which manufacture most of the goods desired for this market, and also might afford the best market for the products of this part of the world, have such infrequent means of ocean communication with Australia, thus preventing much business in goods for which the demand varies according to fashions and seasons. At one time it was possible for importers here to secure advantageous through rates from manufacturing points in the Eastern States by rail to the Pacific coast, and thence by steamer across the Pacific Ocean, but since the withdrawal of the through rates such business has decreased considerably, and now most goods from the United States for this market have to be shipped by the Atlantic Ocean and Cape of Good Hope route.

There have been no American ships at the port of Hobart for over a decade. The number of vessels arriving at Hobart during 1911 was 351, of 1,321,010 tons. The number of French ships calling here for orders was 21, of which 16 obtained bills of health at this consulate on account of intended destination in the United States. These French ships usually arrive at Hobart in ballast and receive cable orders to depart for other ports. They are paid bounties by the French Government proportionate to the mileage of their sailing routes. With the exception of the French ships mentioned, nearly all of the ships arriving here in 1911 were British or Australian, with a few Norwegian and German vessels.

Harbor and Other Improvements—Railway Construction.

The Marine Board of Hobart is spending about \$350,000 on additional improvements to the Hobart harbor, so that it will be possible for the largest ships afloat to load their full complement alongside the wharves, thus anticipating considerable expansion of trade. The continued prosperity and growth of Hobart has induced the city government to initiate many improvements. In addition to a new reservoir, up-to-date abattoirs costing \$150,000 have been erected, while the loan of \$100,000 for laying pavements in the main streets has been authorized. A system of underground sewerage for the city will be completed by June next. At Launceston, the second city of Tasmania, a tramway system was completed last year, which is shortly to be extended.

Two short railways were authorized by the last session of the Tasmanian Parliament. The total railway mileage of the State is at present about 664 miles, including the Government-owned line between Hobart and Launceston, also Government lines paralleling the north coast and several private lines in the mining country of the west coast.

Population—Tourist Traffic.

According to the 1911 census, the population of Tasmania was 192,410, or 7.39 to the square mile. The average population to the square mile for the whole of the Commonwealth of Australia was 1.49. The Tasmanian summers are much cooler than those of Australia, and therefore the island is visited by thousands of tourists from the mainland cities, who contribute largely to the island's prosperity. There are not over a dozen Americans in Tasmania known to the consulate, and these are doctors and dentists and a mine manager.

GERMAN INDUSTRIAL NOTES.

[From Consul Milo A. Jewett, Kehl, Baden.]

New Potash Deposits Discovered.

After numerous unsuccessful attempts to find potash (kali) in Baden, a boring was made in April near Mullheim, Baden, which disclosed a potash deposit 13 feet thick at a depth of 2,322 feet. This research work was conceded by the Ministry of Finance of the Grand Duchy of Baden to Dr. Eltzbacher, of Berlin, about 18 months ago. Further research work is being carried on in the same region.

A new shaft is being constructed at the potash mine in Ballweiler, Alsace. It is near the Rudolf I mine, and will be known as Rudolf II.

It appears probable that Mulhausen, in Alsace, will be made the fourth distributing center for potash, although Strassburg is strongly urging its claims for this important trade.

New Mills in Alsace—Sewers—Aviation and Shipping.

Dollfus-Mieg & Co. will build a new spinning mill at Dornach, near Mulhausen. It will be about 660 by 165 feet, and will employ 1,500 operatives.

The Dietrich Co. has built a new \$500,000 sawmill at Niederbronn, Alsace; daily capacity, 2,800 cubic feet of finished lumber.

Strassburg will spend \$350,000 on improving the city sewerage system.

An extensive aerodrome, with garages for flying machines, Zeppelin and other airships, is nearly completed at Strassburg. Important races were arranged for May 10 and 11.

A new shipping company has been formed in Holland for a direct freight service between Amsterdam and Strassburg. The company has 26 steamers of 750 to 800 tons each, which will touch at the principal Rhine harbors.

Improved Electric Bell System, Vacuum Street Cleaner, and Storage Tank.

A recent invention adopted by the Strassburg Electrical Co. is an electric transformer by which electric-light current will operate the ordinary electric call bells, substituting stationary batteries in each house.

A vacuum cleaner has been adopted to clean the tracks of the Strassburg street railways. It resembles a box car and in addition to the ordinary drive motor has an electric motor which operates a vacuum cleaner within the car. The dirt on the track is sprayed with water, scratched and drawn up into the closed car by the suction apparatus. Twenty-five miles of roadbed are thus effectively cleaned daily by a vacuum cleaner operated by one man, which does the work of 17 men working in the ordinary way.

A new storage tank for benzine and other explosive liquids is being adopted in this region. It allows no air in contact with the benzine, and consequently no explosive gases are generated. The empty space of the tank is filled with carbonic-acid gas and the benzine is forced from the closed tank by a pump which forces carbonic-acid gas into the tank.

The English worsted firm referred to in Daily Consular and Trade Reports for May 24 as moving from Cleckheaton to Doncaster is simply moving its Bradford branch thereto. Consul Ingram now advises that the principal works are at Cleckheaton.

COTTON GOODS IN ARGENTINA.

[From Consul General Richard M. Bartleman, Buenos Aires.]

For the use of the American textile industry, I have obtained a collection of samples representing the more important varieties of textiles imported into Argentina. If the sale of American textiles in this country is small, it is largely the fault of the American merchants and manufacturers, since I am informed that American goods are scarcely known here. They should be properly introduced by commercial travelers prepared to fall in with the wishes of customers, and the travelers should bring with them only the finest and most up-to-date samples. Large sales can be made, I am convinced, if Americans would open up their own houses and sell direct to retailers. In this way they can break into the market as Germany, Italy, and others have done.

Goods are brought here in three different ways: First, leading importers who have their purchasing houses abroad buy direct from the manufacturers, their credit being according to their rating. These importers receive the original invoice. Second, importers may buy through commission houses abroad. They do not receive the original invoice, but get a credit of six months or more. Third, representatives of manufacturers sell goods on a commission basis.

Imports of Textiles Increasing.

Argentina's imports of textile manufactures during the last four years have been as follows:

Articles.	1908	1909	1910	1911
Cotton.....	\$27, 119, 134	\$32, 579, 535	\$37, 375, 090	\$34, 331, 367
Wool.....	8, 990, 084	10, 806, 453	12, 994, 074	13, 750, 514
Silk.....	4, 009, 282	5, 046, 110	5, 429, 184	5, 680, 027
Jute, linen, etc.....	8, 045, 720	9, 394, 271	10, 174, 036	13, 516, 752
Total.....	48, 164, 170	57, 826, 369	65, 972, 384	67, 253, 660

Manufacturers and merchants interested in Argentina's textile trade should read Commercial Agent W. A. Graham Clark's report on this subject, to which I can add nothing. Since Argentina offers the best market in the southern republics for all classes of textiles, the trade is well worth working for.

The 117 samples forwarded by Consul General Bartleman have been sent by the Bureau of Manufactures to the office of the National Association of Manufacturers, 30 Church street, New York City, where they may be examined by those interested. Later they will be sent to other textile centers. Copies of the report by Commercial Agent W. A. Graham Clark, referred to by Consul General Bartleman, may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 5 cents each.

New Handbook of Argentina.

"The Argentine in the Twentieth Century" is a new publication in London which comprises chapters on the various industrial, commercial, and economic features of the country's development. It was written by Albert B. Martinez, undersecretary of state, and Maurice Lewandowski. A copy has been added to the public reference files of the Bureau of Manufactures at Washington.

INTENSIVE FARMING IN SPAIN.

[From Consul Robert Fraser, jr., Valencia.]

The Province of Valencia has an area of 4,150 square miles and a population of 856,188 persons, of which the city of Valencia contains 231,070. The region is almost wholly agricultural, and that part which forms the great plain between the mountains and the Mediterranean is famous as being probably the best and most intensively cultivated region in all Europe. The richness of the soil, benignity of the climate, and skill in irrigation and cultivation, handed down from father to son with but slight modification for four centuries, are the principal factors contributing to this result.

The system of irrigation, so necessary in view of the annual rainfall of only some 17 inches, is especially interesting. The parts of the region which it is not possible to irrigate are so arid as to produce little, whereas the lands of the plain bordering the sea produce such heavy crops as to be extremely valuable. They are officially estimated as being worth an average of \$656 per acre, and are so intensively cultivated that there are cases of official record of 100 acres supporting 160 families, and of single families which live on the product of four-tenths of an acre. In one village of the region farmers are renting land to put under irrigation by pump water at the rate of \$29.50 per acre per annum and paying extra for the water at the rate of 45 cents per hour for a stream giving 200 gallons per minute.

In contrast to these values, wages are low, uniformly averaging 36 to 54 cents per day (without food or lodging) for men and 18 to 27 cents for women. One result of this combination is that it is found cheaper to do almost everything by hand rather than use agricultural machinery; and another, that an amount of minute care and personal attention is given to crops and individual plants impossible under other circumstances. The average production of the most important crops of the Province, given in metric tons of 2,204 pounds, is as follows: Oranges, 400,000; olives, 65,000; carob beans, 72,000; peanuts, 13,500; melons, 36,000; grapes, 87,000; peppers, 12,000; tomatoes, 27,000; wheat, 62,000; barley, 18,000; corn, 38,000; rice, 200,000.

[Irrigation as practiced in Valencia and other parts of Spain was described in Daily Consular and Trade Reports for Jan. 23, 1912, May 26, 1911, Oct. 4, 1910, June 8, 1908, Sept. 19 and Apr. 19, 1907.]

GOLD EXPLOITATION IN VENEZUELA.

[From Consul Herbert R. Wright, Puerto Cabello; supplementing report from Ciudad Bolivar in Daily Consular and Trade Reports for May 25.]

On April 20 two Spanish subjects, Eusebio Rodriguez and Esteban Sivisa, were granted permission by the authorities of Puerto Cabello to exploit a gold field, which, according to a document filed with the public registrar, they have discovered in Borburata, a small village in the suburbs of Puerto Cabello. They claim that the gold field is 200 hectares (494.2 acres) in extent and has much gold quartz, which also contains other metals.

Consul A. E. Ingram notes that a feature of the April shipments (\$728,194 worth) of English wool from Bradford to the United States was that nearly a fifth consisted of skin or pulled wools. April, 1911, shipments were only \$271,132.

ACTIVITIES IN ONTARIAN LAKE CITY.

[From Consul Felix S. S. Johnson, Kingston, Canada.]

Kingston manufactories are, without exception, flourishing. The people having voted concessions to the Canadian Locomotive & Engine Co., it is spending \$500,000 on improvements, and by the end of this year will increase its monthly output from 7 to 15 locomotives and from 600 to 1,000 employees. The Kingston Shipbuilding Co. is adding new machinery. The Wormith Piano Co. has just increased its acreage, trackage, kilns, etc., at a cost of \$10,000. The Davis tannery has increased its capacity, and the volume of business for 1912 is expected to exceed 1911 by \$100,000. The many other industries here are also thriving. The North American Smelting Co.'s plant is to commence operations by June 1, while the Buffalo-Ontario Smelting Co. will be working in a few months with 50 men. The Kingston Brick & Tile Co. has begun with a daily output of 40,000 to 60,000 bricks.

Construction of dwellings, etc., is also active, the building permits for January 1 to April 30 aggregating \$114,949, an increase of \$57,082 over the first four months of 1911. The new hotel company is now prepared to commence erecting its building. The Grand Trunk Railroad is about to erect freight terminals here, having secured water-front rights from the Kingston & Pembroke Railway. Work has also started on the new Welland Canal; with the opening of this canal comes the necessity for harbor accommodations at the foot of the Lakes. The first step for Kingston's greater harbor has been taken (as shown in the report from this consulate in the Daily for May 28).

Kingston is also growing as a trade center. Exports to the United States for the first four months of this year aggregated \$175,027, an increase of \$111,710 over the same period in 1911. Customs receipts of the port for the year ended March 31, 1912, were \$250,215, an increase of \$55,307 over the previous year.

The educational advantages have also widened. Gordon Hall (Queens University) has been completed and opened for students, while the Nicol Building will be opened for next session. Contracts have been awarded for dormitories and for other important additions at the Royal Military College, and when the plans are completed the capacity of the college will be doubled.

WINTER PORT TRADE OF ST. JOHN.

[From Consul Henry S. Culver, St. John, New Brunswick, Canada; supplementing report published May 16, 1912.]

The complete figures for the winter port export trade (1911-12 season) at this port are a most encouraging commentary on the development of St. John. There were 120 sailings, and the exports amounted to \$33,460,460, an increase over the 1910-11 season of \$7,991,428. Of this total, \$17,837,772 represented Canadian goods, \$12,142,688 foreign goods (principally products of the United States), and \$3,480,000 Canadian furs and silver. Of the above exports, \$1,416,232 worth was shipped direct to South Africa, \$1,056,542 to Australia and New Zealand, \$408,609 to Hamburg and Rotterdam, and the balance to Great Britain. The shipments of grain amounted to \$7,967,766.

Of the imports of merchandise, 453 cars were sealed for transportation to the United States.

RUSSIAN COMMERCIAL VISITORS TO TURKEY.

[From Consul General George Horton, Smyrna.]

That Russian business men consider Levant markets worth while is shown by the persistent efforts which they are making to obtain an outlet for their products here. These efforts receive the full support of the Russian Government. The Russian exposition ship, which was sent out in 1910 to the different ports of the Black Sea and the Levant, was an unqualified success from every point of view. This has been followed up by a tour of the principal cities of the Levant by a body of Russian business men and officials.

These gentlemen arrived in Smyrna the first week in April. They met with a cordial reception from the Turkish officials as well as from local business organizations. Commercial relations were discussed, and the fact was brought out that Russian products are gaining ground in this region. It was asserted that as a result of the floating exposition, mentioned above, Russian articles hitherto unknown in the Smyrna district had been introduced here and new business connections formed. The only statistics quoted were those of the Ottoman Chamber of Commerce for 1908, according to which the general trade between Russia and Smyrna amounts to \$1,666,000, exports forming \$423,000 and imports \$1,243,000 of this total.

[Among the numerous references to the Russian floating exposition that appeared in Daily Consular and Trade Reports were the articles published on Jan. 27, Mar. 12, Apr. 9, May 21, and Aug. 30, 1910.]

CHILEAN TRADE AND INDUSTRIAL NOTES.

[From Consul Alfred A. Winslow, Valparaiso.]

Coal has been discovered north of Santiago in the Cordillera in the Province of Aconcagua.

Customs receipts during the first quarter of 1912 were \$12,689,945, against \$11,424,135 for the same time in 1911.

The Arica to La Paz Railway is to be officially opened on August 6, 1912. This will give Bolivia three railroads to the Pacific coast.

Nitrate export taxes for 1911 aggregated \$30,154,110, against \$18,823,780 received by the Chilean Government for import duties during the same time.

The iodine combine that regulates the production of iodine in Chile, and thus fixes the price, has completed arrangements to continue still another three years.

The Government Railways (1,657 miles) were operated during 1911 at a total cost of \$12,748,891, with total receipts of \$10,548,795 from 10,836,605 passengers and 4,489,205 tons of freight.

A new fog signal is to be built at Tumbes Point, near Talchuan, Chile, the contract for which has been let to Benedetti & Bracchiglino. The old fog horn was destroyed by landslides last year.

Tobacco.—A syndicate has been formed in London, England, to develop the tobacco industry in Chile, where excellent tobacco is grown. The idea is to develop all the manufacturing departments of the business.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

No. 658. Navy Department supplies.—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until June 11, 1912, for the following supplies. Firms interested therein should make application to the Bureau of Supplies and Accounts, giving the schedule numbers desired: Schedule 4580, boring and turning lathe. Tenders are invited until June 18 for the following: Schedule 4584, cast-steel Navy type anchors, candles, air hose, rubber fire hose, suction hose, rawhide lacing leather, ships' fishing seines, flax twine in skeins, files, cast-bronze hinges, coat and hat hooks, brass escutcheon pins, galvanized-iron paint pots, galvanized cast-steel crucible wire, sheet tin; schedule 4592, leather belting; schedule 4582, pipe bender; schedule 4595, rubber boots, oiled clothing, oiled long black coats; schedule 4588, carbons for arc lights, fireroom clocks, steam gauges, metallic flexible hose, packing leathers, seamless drawn copper and brass pipe, composition gate valves, single conductor wire, brass bolts and nuts, composition stud bolts, steel bolts and nuts, round bar brass, round naval rolled brass; schedule 4590, rubber insulated lead sheathed cable, mesh fencing; schedule 4593, Portland cement; schedule 4591, magnesia pipe covering; schedule 4587, iron-pipe fittings, galvanized-iron pipe, manganese-bronze forgings, torpedo bronze forgings, mild-steel forgings; schedule 4589, gravel, concentrated lye, building sand, fresh-water laundry soap, salt-water soap; schedule 4581, motor drive tool converting machines; schedule 4586, fish and rail plates, angle bar steel; schedule 4597, stationery, thimbles; schedule 4586, point switches; schedule 4585, white ash, hackmatack knees, white oak, white pine; schedule 4596, alcohol; schedule 4583, muriatic acid, metallic brown in oil, paint drier, chrome green in oil, red dry lead, raw linseed oil, aluminum paint, gum orange shellac, petroleum spirits, artificial dry vermilion, white dry zinc, white zinc in oil. Bids will be received until August 27 for furnishing dark-blue cloth for trousers, jackets, and caps, schedule 4594.

No. 659. Sale of vessels.—Sealed proposals will be received at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until June 10, 1912, for the purchase of the following vessels: Atlanta, at navy yard, Charleston, S. C., appraised value \$10,500; Alvarado, at Morgan City, La., appraised value \$800; Santee, at Naval Academy, Annapolis, Md., appraised value \$12,000; Yankee, aground at entrance of Buzzards Bay, New Bedford, Mass., Yosemite, at navy yard, Norfolk, Va., appraised value \$25,000. Forms of proposals and bond and information concerning the vessels and the terms and conditions of sale may be obtained upon application to the Bureau of Supplies and Accounts.

No. 660. Dummy armament, fire-control apparatus, and accessories.—Sealed proposals for the installation of dummy armament, fire-control stations, and accessories in the army of the Thirteenth Coast Artillery district, New York, and the Ninth Coast Artillery district, New York, will be received at the United States Engineer Office, Room 707, Army Building, New York, N. Y., until June 1 and 3, respectively. Information on application to S. W. Roessler, Colonel, Engineers.

No. 661. Panama Canal supplies.—Sealed proposals, in triplicate, will be received at the office of the General Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., until June 10, 1912, for furnishing the following supplies: Structural steel, rivets, wrought pipe, cast-iron pipe, sheet lead, chinaware, glassware, mess-kit cups, dish pans, bakers' sheets, teaspoons, flesh forks, and waiters' towels. (Circular No. 712.)

No. 662. Interior marblework.—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until June 19, 1912, for the interior marblework (except in toilet rooms) for the United States post office at Minneapolis, Minn. Drawings and specifications may be had from the superintendent of construction at the building, or at the office of the Supervising Architect.

No. 663. Heating and ventilating apparatus.—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until June 21, 1912, for the installation of a heating and ventilating apparatus, etc., for the United States post-office and courthouse building at Charleston, W. Va. Drawings and specifications may be had at the office of the superintendent of construction at Charleston or of the Supervising Architect.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8891. Wharf construction.**—The American consul general at Ottawa, Canada; reports that the Department of Public Works has advertised for tenders for constructing a wharf at Fredericton, New Brunswick, and a pile wharf at Edmonton, Alberta. Bids for the former will be received until June 6, and plans, specifications, and form of tender can be obtained for both undertakings at the Department of Public Works, Ottawa, Canada. Tenders for the wharf at Edmonton will be received until June 17, 1912.
- No. 8892. Timber concessions.**—An American consular officer in Russia has forwarded copies of letters received from a resident of that country in regard to a timber proposition in which he wishes to interest American capitalists. Copies of the correspondence, containing further details, will be sent to firms applying to the Bureau of Manufactures.
- No. 8893. Heating apparatus.**—A report from an American consul in Africa states that a firm in his district engaged in tendering for large heating contracts is desirous of receiving from American manufacturers of heating apparatus catalogues, price lists, and full information concerning radiators, boilers, and heating apparatus of all descriptions for steam, hot and warm water heating. Cable addresses and codes should be included in the information furnished. Up to the present materials for heating systems have been purchased principally in England, and this is an opportunity for American manufacturers to secure at least a share of this trade if they are prepared to quote satisfactorily on the business. It is strongly urged that manufacturers responding to the request of this firm should send duplicates of their catalogues and other information to the consulate for use in answering future inquiries of a similar nature.
- No. 8894. Road machinery and iron bridges.**—Supplementing a previous report on road construction in a Latin-American country an American consul reports that in addition to the road machinery already purchased the Government will probably need more traction engines, rock crushers, cars, etc. These will be ordered early next year. About 13 bridges from 27 to 105 feet long must be built. No provision is made for the material to be used in constructing these bridges, but the consulate was requested to obtain catalogues and price lists showing iron bridges. Communications should be addressed in Spanish to the inquirer, and it would be well also to send catalogues and price lists to another person whose name is furnished.
- No. 8895. Benzine.**—A business firm in a foreign country has written an American consulate that it desires to receive regularly large shipments of American benzine direct, and it would like to get in touch with firms in a position to furnish such requirements. The firm desires to receive this article as cheaply as possible, without the necessity of paying duty in two different countries.
- No. 8896. Moving-picture films.**—An American consul in Russia reports that a business man in his district desires to obtain the sole agency, covering the territory of Siberia and Northern Manchuria, for American moving-picture films. His idea is to introduce the films by means of establishing a film exchange, and with that end in view would be pleased to receive catalogues and enter into correspondence with American manufacturers of this article as to terms and conditions.
- No. 8897. Collapsible lifeboats.**—A report from an American consular officer in a European country states that a firm in his district desires to be placed in communication with American manufacturers of collapsible lifeboats. Owing to recent marine disasters there will probably be a considerable demand for boats of this class in the country in question. The inquirer is prepared to purchase or act as representative. Satisfactory references can be furnished. Correspondence in English, French, or Italian. Catalogues, prices, discounts, and terms are desired.

Scientific apparatus makers in England are rapidly extending their foreign trade this year, the aggregate January 1 to April 30 reaching \$2,517,000, against \$2,200,000 and \$1,256,000 in the same periods of 1911 and 1910.

NOTES FROM MALAYSIA.

[By Vice Consul General D. Milton Figart, Singapore.]

Textbook on Spices.

A new book on spices by Dr. H. N. Ridley, late director of the Botanic Gardens, Singapore, which sells for \$3 gold, is a practical work for planters and treats of soils suited for the various spices, the diseases from which the plants suffer, etc.

Singapore Water Supply.

On March 26, 1912, the new Kallang Reservoir and the Woodleigh filters supplying water for Singapore were opened by the Governor of the Straits Settlements. The total area contributed to the new reservoir is 3,007 acres. The top water area is 253 acres, the maximum depth 27 feet, the total capacity 845,000,000 gallons, and the available storage 211 days' supply when delivering at the rate of 3,500,000 gallons per day, which, taken in connection with the Thomson Road Reservoir, makes a total supply for Singapore of 9,000,000 gallons per day in the driest season.

The filters are slow sand filters, 9 in number, with an area of nearly 7 acres and capable of dealing with 4,000,000 gallons of water per day. After filtration the water is stored in the clear-water tank, which is divided into two portions to facilitate cleansing and has a total capacity of 4,000,000 gallons. The Singapore water supply as augmented by the new works is still considered insufficient for coming years and discussions have already been instituted regarding additional supplies.

Copra Drying.

An idea has been submitted by Mr. Hamel Smith for drying copra by the acre and is receiving considerable discussion in tropical papers. A building with 4 floors about 100 by 30 feet, with an 8-foot shaft is suggested. The skeleton floors are covered with a woven wire fastened to the joists, and in order to prevent rust contamination loosely woven sacking or matting is to be laid over the wire netting. Mr. Smith claims that based on actual results such a building is estimated to be capable of drying 48,000 pounds of copra in 10 hours. The heaters, which will burn husks or other refuse as fuel, heat part or all of the air blown through the airways by 4 propeller fans, and a valve is provided for admitting normal air direct into the building in order to control the temperature.

International Rubber Exposition.

It has been decided that the Federated Malay States shall be officially represented at the International Rubber Exposition to be held at New York September 23 to October 3, 1912, and arrangements have been made to secure suitable space for exhibits in the exhibition buildings. The section will be under the charge of Mr. Leonard Wray, I. S. O., late director of museums, Federated Malay States. No export duty will be charged on approved exhibits. The whole cost of the section will be guaranteed by the Governments of the Federated Malay States and Straits Settlements, but it is hoped that contributions will also be received from associations.

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HONGKONG'S COMMERCIAL YEAR.

[By Consul General George E. Anderson.]

The 1911 trade year in South China had peculiarly mixed results. Its close found commercial circles surrounded with revolution and complaining of depression and stagnation. Practically all local comments upon the year's trade in Hongkong were unfavorable. Nevertheless, both in imports and exports the record of 1910 was equaled and in most cases exceeded, while in few lines was there any greater stagnation than in the previous season.

The general opinion in commercial circles seems to be that while the volume of business was as large or larger than in 1910 it was done at a smaller profit; and in several commodities the year's trading resulted in immense losses.

Exporters of tin, silk, rice, and various other lines after buying a considerable stock were forced to sell at a loss, partly because of a collapse in their special lines and partly because of the revolution's interference with the movement of supplies. Similar losses and small profits seem to have been characteristic of the trade of all China and the Far East.

Causes of Losses in Trade.

Native competition with foreign firms, increasing production of standard goods for export, and increasing direct connections between middlemen and manufacturers have been reducing the margin of profits in trade for a number of years and the business of the country is gradually getting on a new basis.

Political conditions in South China restricted the importing powers of the people and interfered with production and movement of goods to seaboard. An incipient revolution in Kwangtung Province in the spring led to disorder in many of the southern districts, caused nearly 100,000 people to leave their homes and congregate in Hongkong and other ports, even as far north as Shanghai, and led to money hoarding, credit restriction, and general trade disturbance.

Uncertainties of the situation were such that in some respects the actual outbreak of the revolution in October was a relief to business men, as there was a feeling that it was the beginning of the end of

trouble in South China and that whatever the outcome it was bound to be better than conditions which had existed for years. It is significant that the worst quarter of the year as regards Hongkong-American trade was the third, before the revolution came.

The Financial Situation.

The outbreak of the revolution in the autumn resulted in an increased demand for silver and rising exchange checked exports materially, though the condition of the country prevented a corresponding increase in imports. The course of exchange during the year was, on the whole, quite favorable as it remained fairly steady during the first nine months at 42.25 to 43.2 cents gold to the Hongkong dollar, based on London exchange. The lowest rate was 42.125 and the highest 44.75. In October, practically coincident with the beginning of the revolution, commenced a steady rise in silver and exchange. Since the beginning of 1912 rates have gone higher than for years, telegraphic transfers just before the Chinese New Year being quoted at 2s. on London or 48½ cents on the United States. On the whole, however, the revolution has produced much less disturbance financially than might have been expected. The worst effect commercially has been that foreign middlemen were forced to withdraw credit from Chinese buyers, and this restricted business more than any other single element.

Banks, as a rule, paid their usual dividends, though with more difficulty than usual. Transactions in stocks were on a smaller scale, during the latter half of the year particularly, and shares ranged much lower in price than for several years past, though this was due largely to the rubber-share speculation along the China coast during 1910.

Trade with the United States.

The total trade of Hongkong with the United States in 1911 increased immensely over that of 1910 and all previous recent years, due to the extraordinary imports. Hongkong's exports to the United States, including Hawaii, showed but a slight decrease compared with 1910 and were in excess of those of 1909.

The balance of trade was in favor of the United States by about \$4,500,000 gold. American exports amounted to about \$8,500,000 gold and Hongkong's exports to the United States to substantially \$4,000,000 gold. However, Canton's exports to the United States, aggregating about \$7,000,000 gold, with substantially no imports except through Hongkong, made the net balance of trade in this part of China about \$2,500,000 against the United States, as compared with a balance against the United States of perhaps \$5,000,000 in 1910.

There was a heavy movement of money from Chinese and others in the United States to correspondents in and near Hongkong. Local bankers estimated the total valuation of drafts sent from the United States at \$100,000,000 silver or about \$42,500,000 gold. This sum covers the balance of trade and also the savings of Chinese in the United States, including remittances for speculation in silver exchange. Most of these drafts were covered by shipments of silver from North America and by drafts to cover purchases of silver in India through London.

Imports from the United States.

The imports from the United States accounted for the chief increases in the import trade of Hongkong in 1911. American flour at present dominates the market completely, and American oil made up more than half of the total amount imported. The trade of this part of

China in oil at present has settled down to competition between dominant American oil interests and the producers in the Dutch East Indies.

American cotton goods sold in Hongkong in 1911 amounted to more than twice those of 1910, although the total value of the trade does not yet exceed \$100,000. Most of the American goods are still in warehouses because of the unfavorable state of the trade generally. In cotton yarns American manufacturers could reach only the knitting-yarn trade, but in that line they dominate the market.

While the material increase in American imports consisted almost entirely of flour and kerosene, the trade as a whole is more satisfactory than at the close of 1910; more American manufacturers and exporters are represented by agents, and their representation has improved. American exporters are displaying more interest in this market and their goods are in better estimation and repute.

Exports to the United States.

Although the exports to the United States and Hawaii decreased by about 2.3 per cent, there was an actual gain during the last half of the year when the disorder might have explained a less favorable record. There are few items in the exports to the United States which show decreases over similar items in 1910, the declared exports, according to consular invoices, being as follows:

Articles.	1910	1911 ¹	Articles.	1910	1911 ¹
Aniseed.....		\$13,043	Provisions.....	\$619,570	\$510,639
Aniseed oil.....	\$60,695	71,076	Rattan and manufactures....	80,328	58,497
Bristles.....	24,162	46,520	Rice.....	581,853	617,393
Cassia.....	244,042	213,891	Shoes (Chinese).....	58,188	50,428
Cassia oil.....		64,954	Silk piece goods.....	57,334	100,894
Cement.....	6,647		Silk (raw).....	548	
Clothing.....	42,520	38,464	Sugar (refined).....	29,091	37,749
Earthenware and glassware...	44,307	66,019	Soya.....	63,069	42,135
Fireworks.....	26,988	16,494	Tea.....	117,589	108,489
Flour.....	907	868	Tin slabs.....		798,941
Human hair.....	695,137	292,758	Tobacco.....	49,279	51,003
Metal and manufactures.....	769,931	16,538	Wine (Chinese).....	138,445	138,663
Medicine (Chinese).....	82,553	72,873	Wood and manufactures.....	19,780	26,044
Paper and manufactures.....	35,570	27,210	All other articles.....	367,810	241,114
Peanuts.....		23,088			
Peanut oil.....	228,296	300,866	Total.....	4,434,639	4,047,251

¹ Continental United States only.

The large decrease in the figures for exports of metal and manufactures during 1911 is due to the fact that tin is given separately, while it was included under metals and manufactures in 1910.

The total exports from Hongkong to all American territory during 1911, including \$5,509,792 to the Philippines, amounted to \$9,839,188, as compared with \$9,348,853 in 1910 and \$8,344,885 in 1909.

The exports to Hawaii in detail during 1911 were as follows:

Articles.	Value.	Articles.	Value.
Clothing.....	\$1,228	Shoes (Chinese).....	\$5,935
Earthenware and glassware.....	7,781	Silk piece goods.....	4,037
Fireworks.....	9,697	Sugar, refined.....	16
Flour.....	44	Soya.....	1,238
Metal and manufactures.....	2,994	Tea.....	14,934
Medicine (Chinese).....	13,165	Tobacco.....	6,758
Paper and manufactures.....	4,914	Wine (Chinese).....	30,569
Peanuts.....	303	Wood and manufactures.....	1,746
Peanut oil.....	21,770	All other articles.....	18,620
Provisions.....	130,415		
Rattan and manufactures.....	732	Total.....	282,145
Rice.....	5,189		

Trade with the Philippines.

The trade with the Philippines reflects the constantly improving conditions there. Imports from the Philippines were less than in former years for the reason that a large share of the trade which formerly went through Hongkong now goes direct. There was also a decrease in imports of Philippine sugar, since the United States now takes nearly all of the Philippine output.

Hongkong exports to the archipelago, however, show constant increases from year to year, the record of 1911 being the best in the history of the trade. As the value of Philippine exports to Hongkong during 1911 probably did not exceed \$1,000,000 gold at the outside, the balance of trade against the Philippines was at least \$4,500,000, covered largely by heavy remittances from the United States.

Imports of Philippine goods for local use, notably native products like hats, embroideries, fruits, and the like, are considerably on the increase, and there is a strong movement to start a special store for the sale of these products. But the export trade of products for further distribution, such as sugar, hemp, copra, etc., is rapidly disappearing. Philippine figures show that imports into Hongkong for the fiscal year 1911 amounted to only \$874,700, as compared with \$1,458,420 in 1910, \$2,271,016 in 1909, \$2,438,438 in 1908, and \$2,551,902 in 1907. The change is the direct result of the Payne Tariff Act and the increase in Philippine exports of sugar, tobacco, copra, and other products to the United States as compared with its exports to other countries. In spite of this decrease the actual commercial relations of the two colonies are much closer than they have ever been.

Exports to the Philippines.

Exports to the archipelago increased, particularly in standard goods. The declared exports for 1910 and 1911 from Hongkong to the Philippines were as follows:

Articles.	1910	1911	Articles.	1910	1911
Aniseed.....		\$198	Provisions.....	\$1,019,820	\$670,829
Aniseed oil.....	\$1,875	2,111	Rattan and manufactures.....	24,141	19,531
Cassia.....	51	92	Rice.....	1,713,126	2,638,582
Cattle.....	209,097		Shoes (Chinese).....	7,929	2,883
Cement.....	265,638	349,616	Silk piece goods.....	23,881	41,055
Clothing.....	9,616	6,259	Silk (raw).....	113,666	162,944
Earthenware and glassware.....	59,267	48,063	Soya.....	622	1,015
Fireworks.....	9,795	5,848	Sugar (refined).....	207,654	216,593
Flour.....	473	25,901	Tea.....	17,185	13,872
Fruit and vegetables.....	114,254	132,610	Tobacco.....	6,187	6,029
Metal and manufactures.....	60,873	71,653	Wine (Chinese).....	470	327
Medicine (Chinese).....	13,832	15,257	Wood and manufactures.....	44,292	37,760
Paper and manufactures.....	14,953	11,426	All other articles.....	930,640	908,415
Peanuts.....		41,524			
Peanut oil.....	44,847	79,519	Total.....	4,914,214	5,509,792

The heavy increase in rice was to make good the failure of the Philippine crop, and the increase in raw silk reflects the thriving condition of the pina, jusi, and other cloth industries in the Philippines. The decrease in provisions is accounted for largely by the enforcement of the quarantine regulations against uninspected lard. Shipments of cement, the product of the Hongkong factory, have reached almost the volume of those of 1909, when many large public works were in course of construction.

One of the chief features of the commercial relations of Hongkong and the Philippines is shipbuilding and repairing. Most of the larger

steamship interests of the islands have their repairing done in Hongkong shipyards where also launches, lorchas, lighters, and smaller craft generally and large vessels for the transport and interisland trade are constantly being constructed.

The Transit Trade.

While the great mass of Hongkong trade is in goods in transit to or from China, it also includes a large volume of goods to and from other sections of the Far East and Europe and the United States. As a result of the increased number of smaller ships and the tendency to send goods direct to the port of consumption and for other reasons the transshipment trade in Hongkong during 1911 was considerably less than in previous years. The transit trade in gunny sacks for the United States from India decreased materially, but there was a notable development of the trade in bone meal, due largely to lower freight rates. The trade in canes and bamboo materials from Indo-China to both the United States and Europe is growing, but transshipment of rattan has decreased. It is notable that not only has there been less movement of transshipped goods via Hongkong both ways between the Philippines and the United States or Europe, but there has been a material increase in goods from the eastern coast of the United States via Manila to Japanese and other northern ports.

While pessimistic opinions are heard occasionally as to the future of Hongkong as a shipping and transshipment port, the fact that the average size and speed of ships trading to the Far East are increasing, with the result that voyages must become more and more a matter of direct short runs from a principal port in the United States or Europe to a principal port in Asia, it is difficult to see how transshipment in Asia and distribution by smaller vessels can be avoided. This is the basis for the great transshipment trade of Hongkong and there is no reason to expect any great change.

Immigration and Passenger Traffic—Industries.

Steamers did an unusually good business in passenger traffic during 1911. The number of first-class passengers was larger and the number of emigrants leaving the colony was 135,565, as compared with 111,058 the year before and 77,430 in 1909. The number of immigrants returning was 149,894, substantially the same as in 1910. The passenger traffic between Hongkong and near-by points in China, particularly Canton, was the heaviest in the history of the coast, and aided in the restoration of normal conditions in coast shipping.

While there was an unfavorable season for the great sugar refineries, on the whole the year was a fair one for Hongkong's larger industries. The dockyards and shipbuilding establishments turned out more vessels, with notably greater tonnage, and dock work was increased. There was also general prosperity of a modest sort among various smaller industries both in Hongkong and its tributary territory—a prosperity to which American travelers contributed in no small degree.

Reasons for Improvement in Shipping.

The year in shipping has been marked by great improvements in nearly all services connecting China and Japan with the rest of the world, particularly in the character of the ships. There are two reasons for this. The first is a growing appreciation of the world-

wide effect on shipping of the Panama Canal and the second is improved business. It is now generally understood that most of the important lines from Europe to the Chinese coast by way of Suez will, on the opening of the canal, either establish services of their own by continuing the voyages of their ships from Hongkong or other eastern port to the Pacific coast and thence to Europe by way of Panama or will establish such working connections with existing Pacific lines as will insure them a part of the business to pass by the new route. Lines from New York to the Pacific coast of the United States by way of the canal will establish similar lines from the Pacific coast to China or connections which will amount to the same thing. It seems likely, therefore, that the importance of Hongkong as the shipping terminus of most lines to the Far East will be enhanced by these changes.

In general the shipping situation is distinctly better than in recent years. Coast lines, particularly those not subsidized, are still having a hard time maintaining themselves, but they were able to do so in 1911 and pay some slight returns on investments. Freights to Europe and to the east coast of the United States by way of Suez were raised about 10 per cent at the close of the year for effect in the current season. Freights across the Pacific, largely because of the subsidies, are still very low—probably the lowest in the world for similar distances.

Restrictions on Trade—Banking and Finance.

While there was a notable increase in imports in 1911 the commercial situation is by no means satisfactory. It is not free from danger, as a large part of the imports are lying in Hongkong and Shanghai warehouses and there has been no increase in consumption. The high course of exchange at the close of 1911, and especially in the first two months of 1912, makes the danger greater. The high value of the silver dollar gives Chinese importers a great advantage, since a silver dollar will buy more than an ordinary amount of foreign goods. The temptation is strong, therefore, to buy large stocks even without prospects of ready sale, and this is largely responsible for the increased imports of the past few months. If the condition of affairs in China becomes normal early enough in the present year to enable merchants to distribute their large stocks there will be no unfavorable result of the present state of affairs. But the possibilities of the situation were well illustrated in the high-exchange years of 1905–1907 when there were large imports of American and other cotton goods and when years of disastrous depression in the cotton piece-goods trade followed.

One of the first commercial results of disturbed conditions in China was a restriction of credits to merchants from middlemen and a consequent restriction of business. This is probably the chief obstacle to the normal distribution of goods at the present time. It has also increased the demand for specie and bullion and the demand for silver accentuates all the evils of a fluctuating standard of currency. In South China there has been no cessation of the coinage of silver 20-cent pieces, which are at a discount when compared with the corresponding standard dollar, the result being that retail prices generally are fixed in terms of 20-cent pieces, thus raising the price of goods to the consumer about 7 per cent.

Need of Banking Facilities.

The present situation has emphasized the need of adequate banking facilities in China for the accommodation of Chinese business men. This need has been felt to a greater or less extent ever since foreign trade was inaugurated, but in ordinary times the situation can be relieved to a certain extent by an extension of the operations of the foreign banks in the open ports (whose ordinary functions are those relating primarily to foreign-exchange operations) to include more or less support for the uncertain native banks and in some cases to carry importers in transactions which really appertain to the business of Chinese middlemen and should be handled by local banks for such middlemen. In times of stress these unusual functions of the exchange banks become impracticable if not entirely impossible. For example, the goods collected in warehouses since the troubles began can not be moved until more general credit is obtained. Under present conditions foreign firms and banking houses are in no position to extend credit beyond the open ports, and even there only with great restriction. Native banks could afford to go further in extending credits if the banks themselves could be trusted. Under revolutionary conditions this is impossible and the need of an adequate system of Chinese banks under proper supervision, with ample capital and honest methods, was never felt so acutely as now. It is encouraging that Chinese business men are the first to appreciate this fact, and both in Central and South China their first plans for business readjustment have contemplated native banks organized on a modern basis and with more or less foreign supervision. For example, it is proposed at Canton to raise funds for the organization of a bank by pledging the water front to foreign capitalists, the capital to be advanced as needed and the bank to be under foreign supervision and management. Funds for a bank with an initial capital of \$1,000,000 silver (about \$425,000 gold) are also being raised in Shanghai, and similar enterprises are on foot in nearly all of the ports south of Shanghai. Any such institutions will be of comparatively slight benefit until all are brought within some comprehensive scheme of governmental supervision and control, but in the meantime their establishment indicates the trend of business development.

The uncertain course of exchange during the opening months of the new year has already given an unfavorable start to the season, for while the high price of silver stimulates imports for a time, it so contracts exports that imports in turn are soon affected. Taxation in many lines has been suspended in the country for about half a year. In time this need of increased sources of revenue will stimulate trade, for it unquestionably means an opening up of the mineral and other resources of the country with immense benefit to both foreign and domestic trade. Probably the 1912 season will be very unfavorable in most commercial lines in this part of the world, but it will probably be followed by years of development.

Prospects for Extensive Future Markets in China.

There is certain to be an immediate construction of railways, with all the attendant development, and of modern schools, modern buildings, bridges, roads, waterworks, gas and electric light and power plants, and all kinds of public utilities and improvements. There is already an important change in the dress of the Chinese

people in the open ports, and more or less in the interior of the country, which is increasing the demand for foreign fabrics, particularly cotton goods and foreign shoes, hats, and dress novelties.

Factories for the manufacture of Chinese goods in a more modern way and for the manufacture of foreign goods now needed by the Chinese are springing up in all the open ports, and will arise all over China as soon as conditions become more stable. For all these there is an increasing demand for foreign machinery and appliances, especially for small plants and experimental machines. In short, China is entering upon its new era, and all that has ever been said and written about trade possibilities should now be resaid and rewritten as pertinent to the present moment. If ever American exporters and manufacturers were justified in establishing the expensive agencies which are the primary requirement of trade in the Far East it is at the present time.

Hongkong ordinarily furnishes about 36 per cent of all the imports of China, and the Hongkong imports also include great quantities of goods for distribution in all parts of the Far East, the South Seas, etc. Hongkong is the distributing point for South China and south-east Asia generally, and its trade may be taken as a measure of the trade of all this territory.

Fluctuations in Trade in Cotton Yarn.

The largest single element in the import trade of South China through Hongkong is cotton goods and cotton yarn. Taken as a whole, the year's business in both lines was far from satisfactory.

The yarn trade opened up briskly at the beginning of the year in sympathy with rising prices for cotton staple and a general bull movement in the trade. Prices for raw cotton came to such a point, however, that Europe drew heavily on India for staple, and China refused to pay the high prices demanded for Indian yarn. In September, when prices ran lower, it was expected that a considerable business could be done, and heavy orders were placed. With the outbreak of the revolution, however, came a closing of the interior markets, and the result was an immediate piling up of stocks in Hongkong. Stocks during the year averaged about 50,000 bales monthly, but the stock ordered in September for Chinese trade ran to about 250,000 bales. With the outbreak of the revolution monthly clearances fell to as low as 6,000 bales, and with the notable fall in the prices of Japanese yarn soon after there was all but a collapse of the trade.

Prices during the first half of the year ran about \$140 Hongkong currency (\$60 gold at average exchange) per bale for 10's, \$145 (\$62.30 gold) for 12's, and \$160 (\$68.60 gold) for 20's. By the close of the year they had fallen, on an average, about 15 per cent for the 20's and about 10 per cent for the 10's and 12's. The tendency at the opening of the current season was downward.

Accumulation of Cotton Piece Goods.

The record of the year in cotton piece goods in Hongkong, on the whole, was little if any better than that of the unfavorable previous year. During the earlier months the high price of cotton in the United States and elsewhere made it impossible for the average consumer in China to purchase foreign goods and the result was a greatly restricted business. As the price of cotton fell, purchases of foreign goods

increased, but the disorders in the interior during the summer and the revolution in the autumn interfered with shipments of goods and also restricted credits greatly. Shipments both from Europe and the United States continued in spite of the situation here, the comparatively small volume of imports from the United States during the year amounting to about twice the value of those imported in the previous year; but with no sales here the goods received were simply warehoused, so that the opening of the current season found large stocks on hand and considerable uncertainty as to the immediate future. The situation about the close of 1911 became so serious that orders were countermanded freely, and only the willingness of the mills to adapt themselves to the situation prevented disastrous consequences. There were numerous refusals to accept orders on the part of Chinese middlemen, but there was much less trouble of this sort than might have been expected.

There seems to be no question but that the cotton-goods trade in the Hongkong territory and probably in all China is at a turning point. While it is easy to overestimate the effects of the revolution in such matters, the actual existing tendencies in social and commercial lines—as, for example, the disposition of a large portion of the Chinese people in treaty ports and even in interior cities to take up with foreign-style clothing and foreign articles generally—are certain to have an important effect on trade. In Hongkong and near-by ports there has been a change in the demand for cotton goods which is already apparent. The demand for woollen cloths and cotton goods in imitation of wool or of a style to suit Chinese ideas of foreign clothing has increased immensely, while there has been a marked decrease in the comparative demand for goods suitable for Chinese clothing of the old style. This change may or may not become universal in China, but it is already of material proportions and the new demand promises to be indefinitely extended.

At present the cotton-goods situation all over China is uncertain and unsatisfactory. While the stocks accumulated would not be particularly excessive if consumption were normal, the uncertainty of demand and the possibility that many markets in the interior may be shut for months give little promise of trade betterment for some time to come.

Flour Trade Greatly Increased.

A failure of the rice crop in various sections of the Far East, accompanied by comparatively low prices for flour in the world's markets, caused an immense movement of flour to Hongkong, in which the United States, as usual, had the principal part. The total imports for the year were 5,512,502 49-pound bags, of which 5,353,554 bags were imported from the Pacific coast of the United States. The record for the year has been exceeded only in 1900 and 1901. The boom in 1911 extended over into 1912 and 1,000,000 bags of flour arrived in three ships alone during January, one ship, the *Minnesota*, having 500,000 bags aboard.

One of the reasons for this heavy import is the condition of the Yangtze Valley mills because of revolutionary troubles, foreign competition, etc. How long their suspension will continue it is, of course, impossible to tell, but in time it is probable that their business can again be established and American flour will again feel their compe-

tition. At present, however, American mills have only to concern themselves with the possible competition of Australian mills, which are gaining considerable trade not only in China but in the East Indies and other territories where American flour has been used, and with their own high prices. High prices of flour in the United States result in an immediate reduction of the trade in China, as the Chinese can not afford to buy foreign flour at prices much higher than those obtaining during 1911. With conditions remaining as they now are a large trade may reasonably be expected.

Oil Imports Also Much Greater.

The imports of mineral oils into Hongkong during 1911, according to the best information at hand, amounted to a total of 47,620,000 gallons, an amount exceeding all previous records in the trade by about 50 per cent. These immense imports, however, are not a measure of consumption, as more than half of them are now in warehouse in Hongkong, whereas at the beginning of 1911 there were very small stocks of oil in the colony. There has been a great increase in consumption in line with the campaign started over a year ago by the companies concerned in the trade by a general lowering of prices. Of the imports during 1911, 25,000,000 gallons were imported by the Standard Oil Co., about 620,000 gallons by other American companies, and 22,000,000 gallons from all other sources, practically altogether from the East Indian fields.

At this writing (Mar. 21) there are on hand in Hongkong about 16,500,000 gallons of case oil and about 8,000,000 gallons of bulk oil. Most of this is for sale and transshipment to other ports, the actual consumption in Hongkong of all oils averaging about 1,800,000 gallons per year. The actual deliveries for consumption from Hongkong warehouses and tanks during the past year have been approximately 20,000,000 gallons as compared with 13,530,000 gallons in 1910, 11,700,000 in 1909, and 11,440,000 in 1908.

During 1911 prices averaged \$3.50, \$2.75, \$2.25, and \$1.95 Hongkong currency with variations of 20 points either way for the several grades of American oil and \$2.50, \$2.35, and \$2.20 for the three most popular grades of East Indian oils with variations of 30 points either way.

Imports of oil into Hongkong depend upon freights, the price of oil in the United States, production of oil in the United States and the East Indies, and many other elements besides actual consumption here. With the vast stocks now on hand in Hongkong it is doubtful if there will be any material imports during the first half of 1912 and the imports during the whole of the season may be small.

Machinery, Building Materials, etc.

Imports of machinery decreased in 1911, though business during the earlier months was promising. New enterprises have been held back pending the settlement of questions of government and this has interfered with the sale of machinery. There has been a steady increase in the sale of marine motors, small dynamos and general electrical goods, fans and ventilating apparatus, elevators, typewriters, knitting machines, etc., and in the imports of automobiles and parts, but the limit of the latter trade has probably been reached for the

time being. The disorders in the interior have seriously interfered with the trade in sewing machines in which the United States particularly is interested, but with the return of normal conditions sales will expand greatly. A few Chinese contractors in Hongkong are commencing to use modern machinery like concrete mixers, hoisting engines and the like, but the trade is limited at best.

Demand for foreign hardware is steadily increasing, particularly for cutlery and building hardware, glass of the more ordinary grades, and various building materials such as I-beams, nails, rods, and reinforcements for concrete construction. Nearly all lines of iron and steel show increasing trade. In most of the lines mentioned, however, the general increasing course of trade was interrupted at the close of the year and the halt has continued into the present season though it is expected that normal conditions will soon be restored.

Although forbidden by law, there was a large trade in arms and ammunition during the year. Deliveries were made outside of Hongkong or Chinese waters but on orders placed in Hongkong, and as there was a considerable trade in arms for personal defense, for several months all such goods here were at a premium.

Poor Year for Sugar.

The general undersupply of sugar the world over seriously affected the Hongkong sugar trade and the great refineries in the colony handled less than two-thirds of the business they had two years ago and more than one-sixth less than in 1910, which was a poor year. The imports of sugar by places of origin during the past three years have been as follows:

Imported from—	1909	1910	1911
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
United States.....	2		1
Burma.....			89
China.....	12,108	14,719	8,950
Cochin China.....	5,012	3,608	2,373
Germany.....	16		38
Java.....	278,030	221,101	184,874
Japan.....			89
London.....	16	15	6
Mauritius.....	400	556	899
Hongkong New Territory.....	62	164	3,029
Philippine Islands.....	41,930	10,372	9,324
Straits Settlements.....	2,108	1,284	71
Total.....	339,684	251,819	209,743

The exports amounted to about 160,000 tons, most of them, as usual, going to North China. There was an increase in shipments of sugar to the United States and the Philippines during the year, however, and it was shown that with a free market on the Pacific coast a considerable trade could be developed. The particularly small turnover of the Hongkong refineries was a result of the high price of sugar the world over, which had the immediate effect of reducing the demand for refined sugar in North China and thus cutting off Hongkong's principal outlet for sugar. It was significant that much of the raw Philippine product imported into Hongkong during the earlier part of the year was returned to Manila during the prevalence of high

prices, in the latter part of the season, in some cases being sent back in a raw state.

Revised Agreement with England in Opium Trade.

The great event in the opium trade in 1911 was the revised agreement between China and Great Britain as to imports of Indian opium, as a result of which the trade is to be suppressed in less than the original time agreed upon, provided China can show a corresponding suppression of domestic production. The agreement also provides for additional taxation. Up to the breaking out of the revolution China was able to show an immense reduction in the production and use of the drug; but as a part of the agreement China was to admit at the old tax all opium in Hongkong and the treaty ports or en route to either, and as a result about 21,000 chests were admitted at one time from stocks at such ports. It has been agreed, however, that in addition to the decrease in imports from India under previous treaty arrangements there will be an additional reduction during each year for the next three years of one-third of these stocks thus admitted in 1911. Under the general agreement between Great Britain and China the sales of Indian opium during 1911 were not to exceed 30,600 chests, but with the shipment of Hongkong and other stocks into the country the actual sales amounted to about 51,000 chests, or more than the imports theoretically permitted in 1910. The amount theoretically to be imported into China during 1912 under the revised agreement and the further reduction noted will be 18,500 chests; in 1913, 13,400 chests; in 1915, 10,200 chests; and so on, the imports disappearing in 1917.

During 1911 there were great fluctuations in prices. In September the abnormal figure of \$5,000 local currency or \$2,150 gold per chest of 152 pounds was reached, the previous year's highest figure being \$2,850 local currency. The revolution greatly upset the trade, and prices fell away to \$3,700 or \$1,665 gold (at the exchange of that date) per chest at the close of the year. In Malwa prices rose to the high level of \$4,500. The trade in Persian opium, which ceased in 1911 so far as China was concerned, resulted in prices varying between \$1,800 and \$3,500 local currency. The course of the trade during the year in Hongkong, as reported in the Hongkong Government returns, was as follows:

	1911	1910
	Chests.	Chests.
Stock on hand Jan. 1.....	7,123	4,509
Imported during year.....	21,286	31,743
Total.....	28,409	36,252
Consumed, etc.....	761	796
Exported.....	20,061	28,333
Total.....	20,822	29,129

During the year 1,678 chests of noncertified opium were imported, of which 299 chests were exported to Macao; 535 to Kwangchow; 7 to Panama; and 414 were consumed, leaving 423 chests on hand. Trade in morphia and cocaine material decreased during the year, particularly in the latter part.

Imports of Coal Show Little Change.

There was little change in the coal trade. The imports in 1911 amounted to 1,261,671 tons, as compared with 1,280,330 tons in 1910 and 1,219,930 tons in 1909. The feature of the trade was the rise in prominence of several sources of supply in the vicinity of Hongkong, particularly Hongay in Indo-China and Pulo Laut in British North Borneo.

Japanese coal continues to dominate the market absolutely, and there is less and less disposition to buy Welsh coal for any purpose. The imports in detail for the past three years have been as follows:

Imported from—	1909	1910	1911
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Cardiff (including patent fuel).....	48,000	46,000	36,200
Australia.....	46,500	9,700	.....
Japan and Formosa.....	924,780	932,780	932,856
Hongay.....	85,000	110,200	130,610
Borneo:			
Pulo Laut.....	18,000	2,000	37,450
Brooketon.....	.....	3,950	.....
Haiphong and Tonkin.....	8,500	22,300	16,150
Tsingtau.....	.....	4,000	2,000
Batan (Philippines).....	.....	1,600	.....
Tourane.....	4,700	8,700	.....
Kebo.....	6,200	4,500	.....
North Borneo (Sebatu).....	6,000	6,600	3,700
Kaiping.....	52,000	44,900	40,130
Manchuria.....	17,250	85,000	53,575
Labuan.....	3,000	.....	.....
Miscellaneous.....	.....	4,100	.....
Total.....	1,219,930	1,286,330	1,261,671

General Condition in Export Trade—Human Hair.

The general course of the export trade was normal until the rise in exchange, coincident with the revolution, in October. Orders placed previous to that time went forward, but the high exchange prevented any general maintenance of trade in good volume into the current year. In the last two months of the year the revolution interfered considerably with deliveries.

Exports of human hair greatly increased in the latter half of 1911. In 1910 the climax of the trade came in the first six months when total exports to the United States from Hongkong reached a value of \$516,410. In the latter half of 1910 the market collapsed and the exports to the United States amounted to only \$178,727. For the first six months of 1911 the amount fell to \$53,853, but the latter half showed a value of \$241,452, making the total for the year \$295,315 as compared with \$695,137 in 1910, \$327,559 in 1909, and \$92,209 in 1908.

Shipments from the Hongkong market in 1911 to all countries were much larger in volume than the year before, aggregating about 1,759,833 pounds as compared with about 1,200,000 pounds in 1910, a great proportion of them, however, being of low-grade hair. It is doubtful if the total value of the season's shipments will exceed \$900,000 gold as compared with a total value of \$1,500,000 in 1910. Prices at the close of the year were firm and showed a marked disposition to rise. The cutting of queues, instead of increasing the supply of hair in this part of the world, is gradually doing away with the source of supply and with only the same amount of effort in collecting the amount available will soon fall far short of the demand.

Increased Shipments of Tin.

In spite of the fact that the output of tin from the Yunnan mines, which is refined in Hongkong, was about twice the shipments of 1910, the year was a disastrous one to the local trade owing to the collapse of the market about the middle of the year. The figures of the Hongkong General Chamber of Commerce show shipments to Great Britain in 1911 of 9,126 slabs as compared with 3,395 slabs in 1910 and shipments to the continent of Europe of 10,626 slabs as compared with 5,815 slabs in 1910, a total of 19,752 slabs, or 2,212,224 pounds, in 1911 compared with 9,210 slabs, or 1,031,520 pounds, in 1910.

A large portion of the shipments to Europe are made on option for the United States and the latter country takes a much larger share of the output than the figures indicate. Declared exports to the United States direct from Hongkong amounted in value to \$798,941 as compared with about \$750,000 the year before. About 55 per cent of the shipments were made in the second quarter, while in the following quarter no shipments whatever were made.

Prices during the second quarter ran so high that Hongkong smelters entered into engagements with producers in China at high prices. When the collapse of the market came exporters were caught with a considerable stock of tin bought at high prices, which they held as long as possible in the hope that the market would come within their reach again, but during the last quarter of the year they began to sell in small quantities at a loss. Shipments during the March quarter were valued at \$181,812; during the June quarter \$433,685; and during the December quarter \$183,444.

At the opening of the present season in Hongkong smelters and dealers held at least \$1,800,000 gold worth of tin at current market prices. During 1911 prices in Hongkong varied from \$96 to \$126 Hongkong currency per picul of 133½ pounds—from 72 to 94.5 cents Hongkong currency, or 30.9 to 40.6 gold cents, per pound at exchange of 43 gold cents to the Hongkong dollar.

Losses in the Rice Trade.

In spite of great activity in the rice trade during parts of the year local middlemen lost heavily on the year's business. The trade in general opened briskly and in fact was above the normal for the first three months, the imports from Saigon exceeding those of any previous spring quarter. Later supplies were smaller and on the average the receipts were normal during the year until August. At that time the successive failure of crops in the Philippines, Indo-China, Burma, and elsewhere in the Far East led to famine conditions, and Hongkong dealers bought all the supplies they could get, at prices ranging up to twice normal values. With action on the part of various governments in the Far East to protect their people from a corner in the staple and with the appearance of reserve stocks prices fell off about \$20 gold per ton at a time when local middlemen had 35,000 tons in warehouse in the colony, and that figure represents their direct loss on substantially that amount of grain held, not including their losses on grain not received here.

The result has been that in spite of the prospect of a poor year in rice production all over the East and short supplies for all of the consuming countries commercially tributary to Hongkong, stocks

held are small and there is a strong indisposition to carry any stocks of material size. The end of the year found about 7,000 tons in Hongkong warehouses. The total trade handled during the year was probably about 300,000 tons below the average. Prices ranged over a wide margin, reaching about \$75 gold per ton during the height of the shortage—substantially twice the average ordinary price. At no time during the season were prices low.

Cassia and Cassia Oil Shipments.

There was a brisk trade in cassia of various grades and in cassia oil during 1911, and the United States participated in the increase. Shipments of cassia oil to all ports amounted to 2,200 62-pound cases as compared with shipments of about 1,400 cases in 1910. The course of the market was rather uncertain at the opening of the season, a speculative group in Hongkong cornering the supply and forcing the price from an average of \$210 local currency per picul—about 66 cents gold per pound—to as high as \$260 local currency per picul, or about 82 cents gold per pound. Prices after this flurry held to a normal level until the breaking out of the revolution in October, when, by reason of interrupted deliveries from the interior, the supply fell short and prices again advanced to the high point noted. Dealers in Europe and the United States refused to pay the advance, however, with the result that except on forward contracts little oil was shipped during the last quarter of the year. The price closed about 5 per cent above the average level.

In the various grades of cassia there was an immense increase in shipments both in the Chinese and the Indo-China or Saigon product. Chamber of commerce figures report total shipments for the year as follows, in boxes of 62½ pounds net:

Destination.	1910	1911
Continental Europe:	<i>Boxes.</i>	<i>Boxes.</i>
Lignea.....	23,903	50,962
Broken.....	11,060	23,135
Great Britain.....	3,190	5,537
United States.....	27,076	63,329
Total.....	65,259	142,963

Of the total amount exported about 80,000 cases were of cassia lignea and the rest of broken cassia. The average price of lignea during the year was \$18.80 local currency per picul, or about 5.9 cents gold per pound, while in 1910 it was about \$19.80 local currency or, at the same exchange, about 6½ cents gold per pound, which was also the prevailing price at the opening of the season of 1911. The general decline was due rather to the need of ready money in China than to any slackening of demand in the United States or Europe or any oversupply here. The value of shipments of cassia and cassia oil to the United States increased from \$244,042 in 1910 to \$278,845 in 1911.

Losses in Silk Trade.

In the silk trade also there were losses from poor buying on the part of exporters. The first half of the season was dominated by a strong demand for nearly all lines from the United States, and exporters bought stock in the belief that such demand would last

indefinitely, and for the same reason producers insisted on high prices for their silks. A great Japanese crop, however, gave an unusual supply and prices fell off accordingly, while exporters held to their wares in the hope of a recovery of prices. They sold grudgingly later at a loss. The trade in raw silk was very much depressed during the closing months with large stocks on hand and a weak demand, but the movement of waste silks was good during the whole season and the year's supplies were partially cleared. The year's crop in the Pearl River delta is estimated at about 20 per cent less than that of the previous season. The year's shipments of raw silk from Hongkong totaled 42,883 bales of 112 pounds net as compared with 54,129 bales in 1910. Stocks on hand in the market amount to about 8,000 bales as compared with about 2,000 bales last year. Commercial returns report the comparative exports of silk products during 1910 and 1911 as follows:

Exports.	To Europe.		To the United States and Canada.		Total.	
	1910	1911	1910	1911	1910	1911
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
Raw silks.....	34,609	27,847	19,520	15,036	54,129	42,883
Waste silks.....	29,298	28,415	6,366	7,577	35,664	35,992
Pierced cocoons.....	4,464	5,161	943	800	5,407	5,961
Total.....	68,371	61,423	26,829	23,413	95,200	84,836

Prices declined about 10 per cent during the year and the season of 1912 opened with poor prospects.

Good Trade in Mats and Matting.

There was a smart recovery in the volume of the manufacture and export of straw mats and matting during the year. The exports of mats particularly took a spurt, an unusual demand coming from Europe, and estimated to have exceeded 16,000,000 pieces as compared with about 12,500,000 pieces in 1910. Exports of matting, according to the figures of the Hongkong Chamber of Commerce, aggregated 343,000 rolls as compared with 79,763 rolls in 1910. Of these shipments 34,288 rolls went to Great Britain, 90,000 to the rest of Europe, and 218,532 to the United States and Canada. These figures, however, are probably less than the actual amount shipped, as shipments from Canton alone during the first nine months of the year aggregated 324,668 rolls and the amount from Indo-China handled during the year was unusually large. The continent of Europe, particularly the Netherlands, was an unusually good market during the season.

Prices were very unsatisfactory to the trade generally and particularly to the manufacturers. At the opening of the season they were the lowest recorded and if the people of the districts concerned had not simply been forced to do something to live there would have been no greater trade in all probability than the depressed trade of the past two years and a half. The interference by disorders last spring and by the revolution which not only made deliveries uncertain but also made the transmission of cash money into the interior difficult, led to some slight recovery in prices. The trade generally, however,

though large in volume is not in a healthy and satisfactory condition and much improvement can not be expected until prices in the United States and Europe change.

Vegetable Oils, Meats, and Provisions.

In line with the increased world demand for vegetable oils there was a marked increase in the year's shipments from Hongkong to Europe and the United States of wood, tea, nut, peanut, and bean oils. There are no reliable figures as to the amounts exported, but the total was near 30,000 tons, valued by the Chinese customs at about \$2,900,000, an increase of about one-third over 1910. Exports to the United States increased in about the same proportion, shipments of peanut oil, for example, being valued at \$300,866 in 1911 and \$228,296 in 1910. This trade is still on the increase; and steel drums sent out empty from the United States for oil are now being used.

During the year there was a suspension of the meat and lard shipments to the Philippines for a time, and the trade, which amounted to a trifle over \$1,000,000 gold, exclusive of live cattle, in 1910, fell off about a third. This, however, was due to the enforcement of the pure-food law in the Philippines and not to actual trade conditions along the South China coast from which such supplies are drawn. Toward the close of the year modern factories which met all requirements of American and Philippine regulations were established and the trade has been renewed upon a larger scale.

The present indications are that during 1912 more meat and lard will be shipped from Hongkong to the United States and the Philippines than ever before. Besides the modern lard factories established at Hongkong, one has been built at Canton, the output of which is handled by Hongkong middlemen, and arrangements are being made for drawing upon the live-stock supplies as far north as Ningpo for Hongkong shipments. There is apparently no reason why the export of meat and meat products from South China should not be carried on to a very large extent.

There has been a prejudice against Chinese meats, particularly pork products, all over the world, which at times and in some localities has been justified. At the present time, however, both in South China and the Yangtze Valley, meat and meat products of high quality are being produced which have met every test both here and in Europe; and with arrangements now already made in some localities for the careful examination of all animals and meats and meat products by officers qualified by American or other foreign training, there is no occasion for further prejudice. Meats can be produced in South China and the Yangtze Valley, and indeed all over China to some extent, at a price to compete successfully with meats from any part of the world, and shipment of Chinese meats, and Chinese lard particularly, to the Pacific coast of the United States is a strong probability of the near future.

Sales of Tea, Canes, Batts, etc.

Exports of tea were considerably less than in 1910, although the crop was greater. In 1911 a total of 65,454 chests were sent out, as against 90,883 chests in 1910. For South China teas there is no life in the market and none in prospect. Shipments from Hongkong to

the United States in 1911 were almost entirely of miscellaneous lots for the use of Chinese.

The export trade in canes for various purposes, including both the fancy canes from Indo-China and the more ordinary variety from the Pearl River delta, has been on the increase. The figures of the Hongkong Chamber of Commerce show total exports of 47,414 packages in 1911, but it is probable that the actual shipments were considerably larger. About half of the entire trade goes to the continent of Europe, Great Britain taking about two-thirds of the balance and the United States the rest, including, however, some shipments to Canada.

Shipments of rattan and rattan furniture have fallen off considerably, those to the United States, for example, amounting to only \$58,497, as compared with \$80,328 the year before. Exports of Chinese blackwood and other furniture to the United States and Europe increased about 25 per cent, though the volume of the trade as yet is not large. There is a constantly growing trade in Chinese and other embroideries out of the port, including embroidered silk piece goods, "Swatow" grass-cloth work, drawn work of various sorts, and many other products of a similar nature which have been introduced in the United States and Europe to a greater or less extent by tourists passing through this portion of the world.

In general, there was a falling off in exports of goods for the use of Chinese abroad, such as tinned Chinese foods, Chinese clothing, Chinese medicines, and Chinese novelties.

Firecrackers and Bristles.

Exports of firecrackers during 1911, according to the figures of the Hongkong General Chamber of Commerce, amounted to 97,434 cases, as compared with 60,081 cases in 1910. The exports to Great Britain in 1911 were 12,866 cases, as compared with 11,595 cases in 1910; to the continent of Europe, 7,092 cases, as compared with 3,541 cases in 1910; and to the United States and Canada, 77,476 cases, as compared with 44,945 cases in 1910. These figures are from commercial sources and are probably considerably under the actual volume of trade, but they indicate the general trend. Fewer firecrackers were invoiced out of the Hongkong consulate for the United States in 1911 than in 1910.

Shipments of bristles also showed notable improvement, those to Great Britain amounting to 2,620 bales, as compared with 863 bales in 1910; to the continent of Europe, 6,926 bales, compared with 5,772 bales in 1910; and to the United States, 688 bales, compared with 305 bales the year before.

[Reports already printed dealing with conditions in Hongkong have appeared this year as follows: Steamship service, Apr. 2, May 9; ginseng, Apr. 6; tea trade, Apr. 12; flour imports, Mar. 5; trade in human hair, Feb. 28.—B. of M.]

"Electric Vehicles in England and the Difficulty of Battery Charging" is the subject of a lengthy report forwarded by Consul Albert Halstead, of Birmingham, and which will be loaned to interested firms on application to the Bureau of Manufactures, Washington, D. C.

OUTPUT OF CANADIAN BUTTER AND CHEESE FACTORIES.

[From Census and Statistics Monthly.]

The census records of butter, cheese, and condensed milk produced in Canada in 1910 show that there were 3,628 factories in operation that year. The quantity of butter made was 59,875,097 pounds, having a value of \$15,682,564; the cheese output was 231,012,798 pounds, worth \$21,620,654. This was an average of 26.2 cents per pound for butter and 9.36 cents for cheese, in contrast to respective averages of 20 cents and 10 cents a pound in 1900.

The factory production of butter and cheese in 1900 and 1910, by Provinces, was as follows:

Provinces.	1900		1910	
	Pounds.	Value.	Pounds.	Value.
BUTTER.				
Alberta.....	406,120	\$82,630	2,149,121	\$533,422
British Columbia.....	395,808	105,690	1,206,202	420,683
Manitoba.....	1,557,010	292,247	2,050,487	511,972
New Brunswick.....	287,814	58,589	849,633	212,206
Nova Scotia.....	324,211	68,686	354,785	88,481
Ontario.....	7,559,542	1,527,935	13,699,153	3,482,171
Prince Edward Island.....	562,220	118,402	670,913	156,478
Quebec.....	24,625,000	4,916,756	37,346,107	9,895,343
Saskatchewan.....	339,014	70,037	1,548,686	381,809
Total butter.....	36,056,739	7,240,972	59,875,097	15,682,564
CHEESE.				
Alberta.....	27,693	3,970	193,479	23,473
Manitoba.....	1,289,413	124,025	604,713	81,403
New Brunswick.....	1,892,686	187,106	1,166,243	129,677
Nova Scotia.....	568,147	58,321	264,243	29,977
Ontario.....	131,967,612	13,440,987	157,631,823	14,845,661
Prince Edward Island.....	4,457,519	449,400	3,293,765	354,378
Quebec.....	80,630,199	7,957,621	67,741,802	6,152,689
Saskatchewan.....			26,730	3,396
Total cheese.....	220,833,269	22,221,430	231,012,798	21,620,654

The increased price of factory butter led to a larger production in 1910 than in 1900, and this was made, especially in Quebec, at the cost of a smaller production of cheese. The change was further induced by the lower rate of duty on cream in the United States, which encouraged exports to that country.

The number of condensed-milk factories in operation increased from 4 in 1900 to 12 in 1910, and the value of the output from \$269,520 to \$1,839,871. There are now 6 factories in Ontario, with a product value of \$1,335,689; 2 in Nova Scotia, with \$133,956; 2 in Quebec, with \$275,000; 1 in British Columbia, with \$44,326, and 1 in Prince Edward Island, with \$50,900. In 1900 there were 2 factories in Nova Scotia and 1 each in Prince Edward Island and Ontario.

Mixed Packing Causes Damage.

Consul Maxwell K. Moorhead, of Rangoon, calls attention to an instance of bad packing that came under his observation. Nails, plumbago, and toothpicks, shipped from Chicago, were packed in one case, with the result that the toothpicks were completely demolished. The shipper, however, acted in a very fair way and paid for the damage.

LINEN YARNS AND PIECE GOODS.

(From Consul Hunter Sharp, Belfast, Ireland, May 8.)

A very satisfactory increase is shown in the exports of linen piece goods from the United Kingdom for March and for the three months ended March 31, 1912, as compared with the corresponding periods of 1911. A particular feature is the increase in the shipments to the United States. The total exports to that market in March amounted to 15,111,500 yards, the heaviest yardage in any single month since January, 1910. The demand from South American markets dropped somewhat, but India continued to forge ahead and Canada improved slightly, while there was little actual change in the shipments to Australia and New Zealand.

The exports of linen yarns and linen piece goods from the United Kingdom during the first quarter of 1911 and 1912 are summarized below:

Linen yarn and piece goods.		1911	1912
YARN.			
Total exports.....	value.....	\$1,577,695	\$1,586,410
Total quantity.....	pounds.....	4,878,600	4,681,900
To United States.....	do.....	424,900	591,600
PIECE GOODS.			
Total exports.....	value.....	\$7,513,910	\$7,683,449
Total quantity.....	yards.....	54,694,100	55,700,300
To United States.....	do.....	30,466,900	34,401,900

While the demand for most classes of manufactured goods has tended to go a trifle slower, there has been no check to the upward trend of prices, and linen buyers who have been keeping out of the market in the hope of securing more favorable terms are faced with a much stronger position than that which ruled earlier in the year.

Increased Cost of Production—Flax-Crop Outlook.

Costs of production have increased substantially since the beginning of the year, and, taking these into account, manufacturers' quotations are said to be, if anything, still on the low side. The advance has been most pronounced in tow yarns, and spinners are quite indifferent about fresh contracts for tows, owing to their already heavy engagements and the increasing difficulty in securing suitable raw material.

The increased cost of fuel is also a factor affecting the price of the finished article; and though quotations for coal have shown some decline with the resumption of work on the part of the miners, there is every probability of a permanent increase as compared with recent years.

The outlook for the new season's flax crop on the Continent and in Ireland is not encouraging, as a substantial decrease in the acreage appears certain. In Belgium it is the general belief that the sowing, which is now practically completed except in a few late districts, will be smaller than in 1911, while in the Netherlands it will be about one-third less. In Ireland the reports indicate smaller sowing than last year, and, though in some districts a small increase

is thought likely, it seems to be the opinion here that there may be a falling off of 15 to 20 per cent. Last year's yield was very unsatisfactory, and despite the high prices the net return of the grower offered little inducement to a larger sowing.

INDIA TRADE NOTES.

[From Consul Stuart K. Lupton, Karachi.]

Gross railway earnings of India for the past official year are reported at \$164,079,898, a gain of \$14,670,990 over the previous year.

The Kalka-Bayenath railway survey, in the Punjab, with a length of 169 miles, 2 feet 6 inches gauge, has been sanctioned, to be undertaken by the Northwestern Railway.

Molasses imports at Karachi from Java are increasing heavily, owing to the great rise in price of the native article. The molasses is largely used for distilling spirits at Kotri and other up-country points.

The Karachi Port Trust reports that the year ending March 31, 1912, was the most successful on record. Receipts were \$1,300,840, or \$147,794 in excess of the budget estimates and \$151,344 in excess of the previous record, that of last year. Expenditures were \$1,012,743. While the total trade of the port amounted to \$149,224,000, the port charges thereon were over \$1,324,000, and in Bombay, on a trade amounting to \$613,116,000, charges were only \$2,789,840, showing that port charges at Karachi are more than double those of Bombay.

The Northwestern Railway.

The Northwestern Railway, which is practically the only means of transportation in this consular district, had a most successful year in 1911-12. Earnings amounted to \$26,503,480, as compared with \$23,908,280 in the previous year. The tonnage delivered at Karachi was a record.

A great deal of difficulty was experienced in handling the traffic, as the double track only extends 400 miles, from Karachi to Samasata. In addition, imports of coal from Bengal enormously increased in the latter part of the year, owing to the coal strike in Great Britain, while large quantities of fodder were shipped out of this district to relieve scarcity in other parts.

The budget for the coming year includes \$3,406,200, for increased facilities on the open lines, with a further \$4,622,700 for additional rolling stock. On January 1, 1912, sanction had been obtained for 137 locomotives, 362 passenger cars, and 2,562 freight cars, a large portion of which had been already contracted for. [The name of the person in India who is making the contracts at the present time for this class of supply may be had from the Bureau of Manufactures, at Washington.]

New construction is responsible for an allotment of \$1,735,540, and work is being pushed on the following branches: (1) Jakhal-Hissar, 50 miles; (2) Bannu-Khalabagh, 90 miles; (3) Serai Kala Havelian; (4) Jullundur-Hoshiapur, and it is hoped that they will be in operation by the end of the present fiscal year.

SOUTH AFRICA'S FLOUR TRADE.

[From Consul E. A. Wakefield, Port Elizabeth.]

From present indications flour will be produced more extensively from year to year in South Africa.

Ostriches and cattle have in the past occupied the attention of the average farmer to an extent that has prevented an extensive crop production. Conditions of the soil in many sections, combined with a light and uncertain rainfall, have been leading factors in the farmers' decision to depend principally on stock raising.

Recently there has been a decided tendency to generalize farming wherever conditions are at all favorable. This tendency has been encouraged by public men generally, and by the Government and its agents especially, throughout the South African Union. As an example may be cited the recent acquisition of a large tract of land in Cape Province near Carnarvon for producing wheat. About 200,000 acres are reported to be suitable for wheat growing, and this year's product, with only a small portion under cultivation, approximates 25,000 bags. In the opinion of thoroughly informed men, proper conservation of water and proper irrigation will permit abundant crops of wheat in many sections where little or none is now produced.

Imports of wheat into the Port Elizabeth consular district during 1910 amounted to \$1,827,000 and in 1911 to \$1,468,000, of which 90 per cent was from Australia.

Imports and Exports—Terms and Packing.

Flour imports for 1910 amounted to \$850,000 and to \$803,000 for 1911. Of these imports, Australia supplied more than 56 per cent, Canada over 38 per cent, and the United States a little above 3 per cent. In flour imports for 1911, as compared with the figures for 1910 for South Africa, Australia shows a falling off of \$100,000 and Canada a loss of over \$25,000, while the United States gained \$9,000. This is, perhaps, in a measure accounted for by the presence of a local representative of one of the large American milling companies.

Quite a considerable portion of the wheat imported is ground in bond and exported as flour to other sections of Africa not included in the Union. Flour exports from the Union of South Africa are nearly all to German Southwest Africa and amounted in 1911 to about \$230,000, of which only \$30,000 worth was from locally grown wheat. Flour exports for 1911 exceeded those for 1910 by \$25,000.

Flour is purchased from milling companies direct and also through commission agents. [A list of importers of flour in the Port Elizabeth consular district may be obtained from the Bureau of Manufactures.] Terms are usually either cash on presentation of shipping documents or drafts payable 30 days after presentation of documents. Sixty or ninety days' credit is readily obtainable, if desired, by reputable firms. Letters of credit from purchaser to seller are quite commonly used, more especially in wheat transactions.

Flour is nearly all packed in single sacks of white cotton or hessian, containing 98 pounds. Some flour is imported in 25 and 50 pound sacks and some is double sacked, but those are exceptions rather than the rule.

Grades—Prices for Imported Flour.

There are numerous grades on the market, but the bulk of flour sold is of the soft-wheat variety. Australian flour is nearly or quite

all made from soft wheat. Canadian flour is composed of entire hard-wheat flour, and a variety of blends of hard and soft wheat. South Africa produces both hard and soft wheat, but the bulk is soft. Local mills manufacture blended wheat and soft-wheat flour, but, so far as can be ascertained locally, none from entire hard wheat.

Purchasers are certain to buy where they secure the best satisfaction—price, quality of product, and prompt delivery being the principal considerations. Other conditions being equally satisfactory, most importers would prefer to deal direct with the manufacturer. Present (April) prices for imported flour, per bag of 98 pounds net, are:

No. 1 Canadian hard wheat.....	\$2. 75
No. 2 Canadian blend hard and soft wheat.....	2. 71
No. 3 Canadian blend hard and soft wheat.....	2. 69
No. 4 best Australian soft wheat.....	2. 43

These prices are for shipments c. i. f. Port Elizabeth, but do not include duty or landing charges; 63 to 67 cents should be added to the above figures to represent the landed cost of these products. There are at least two cheaper brands of Australian flour on the market.

The Local Product.

Quotations per bag of 98 pounds (net) for locally manufactured flour are:

No. 5 Canadian and Australian wheat.....	\$3. 65
No. 6 hard and soft wheat blend.....	3. 53
No. 7 same as No. 6, with less hard wheat.....	3. 40
No. 8 blended local wheat.....	3. 40

These are prices quoted at the local mills, of which there are four, and a sample from each mill is submitted. [These samples will be loaned by the Bureau of Manufactures.] Discounts vary from 5 to 8 per cent, but usually the full 8 per cent is allowed. Flour manufactured from local wheat is entitled to a very favorable rail rate, which is a decided advantage for interior shipments.

[The flour trade of the Johannesburg (South Africa) district was reviewed by Consul Edwin N. Gunsaulus in Daily Consular and Trade Reports on Feb. 15, 1912, and an article by Consul George A. Chamberlain, of Lourenco Marquez, published Mar. 12, covered the flour situation in Mozambique Province, Portuguese East Africa.]

NEW SOUTH AFRICAN FOOTWEAR FACTORY.

[From Consul Nathaniel B. Stewart, Durban, Natal.]

A concern, under the name of the Union Boot Manufacturing Co., of South Africa (Ltd.), with a capital of \$73,000, has been formed to establish a factory in Pietermaritzburg for all classes of footwear. The promoters of the enterprise estimate that a dividend may be expected in three or four years. The delay will be due to the necessity for procuring suitable buildings and then importing the proper machinery from Europe and America. American manufacturers of boot-making machinery might find it advantageous to get in touch with the secretary of the recently organized company.

The total value of boots and shoes imported into British South Africa during 1911, according to customs figures, was \$5,709,962, and the value of those imported through Natal was \$1,138,858.

INCREASED AMERICAN PURCHASES FROM JAPAN.

[By Consul General Thomas Sammons, Yokohama.]

There was an increase of nearly \$1,000,000 in the value of merchandise invoiced through the three American consulates in Japan—Kobe, Nagasaki, and Yokohama—and the consulates at Dalny, Manchuria, and Tamsui, Formosa, to the United States last year compared with 1910. These exports were valued at \$73,729,760, in addition to which \$3,528,961 represented charges on the goods at the various ports.

Of the total exports last year from the five consular districts named, the consulate general at Yokohama and its agency at Hakodate certified shipments amounting to \$61,978,430, consisting principally of raw and waste silk, copper, linen and silk goods, tea, peanuts, plants and bulbs, cotton goods, toys, and sulphur. The shipments from Kobe and its agency at Yokkaichi were valued at \$11,529,446, and consisted principally of metals, straw mattings and braids, brushes, bamboo and wood ware, tea, rice, and porcelain and earthenware. Those from Formosa were made up principally of Oolong tea and camphor; from Tamsui, graphite; and from Dalny, soya bean oil.

Exports to United States.

The following table gives the articles and their value invoiced through the five American consular districts to the United States for 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Antimony ware.....	\$63,800	\$66,918	Mineral water.....	\$1,596	\$2,785
Awabi, etc.....	25,608	19,294	Mushrooms.....	43,974	41,640
Bamboo and bamboo wares.....	260,824	355,101	Paper.....	97,716	120,719
Bean oil.....	93,974	89,498	Paper goods.....	110,384	134,076
Books.....	35,120	40,867	Peanuts.....	274,634	291,292
Braids, chip and straw.....	1,201,905	962,800	Peppermint oil and crystals.....	74,626	140,023
Brushes.....	571,394	578,747	Personal and household effects.....	60,500	39,153
Camphor and camphor oil.....	1,403,928	1,066,850	Plants, bulbs, etc.....	238,604	241,572
Carpets and rugs.....	237,720	50,394	Porcelain and earthenware.....	1,162,707	1,117,686
Chilies, ginger, etc.....	57,357	76,547	Provisions.....	842,436	1,119,741
Coal, coke, and charcoal.....	190,061	2,890	Rice.....	452,117	520,842
Copper.....	2,153,349	2,013,197	Sake.....	117,332	123,902
Cotton and cotton goods.....	374,303	455,927	Shoyu.....	138,726	131,030
Curtains.....	432,453	327,793	Silk goods.....	2,907,675	2,845,732
Fans.....	66,601	90,924	Silk, raw and waste.....	43,516,136	43,648,340
Furniture, screens, etc.....	55,672	55,445	Straw matting.....	1,545,168	1,319,993
Glassware.....	17,978	3,527	Sulphur.....	459,732	361,357
Graphite.....	20,593	14,067	Tea:		
Gut string.....	48,481	28,220	Green.....	5,890,352	6,138,662
Hides, skins, leather, furs, and leathers.....	37,510	93,849	Oolong.....	2,638,542	2,999,455
Ink.....	2,355		Timber and lumber.....	247,553	297,805
Isinglass, vegetable.....	78,008	48,578	Toys.....	38,750	314,440
Lacquered ware.....	42,091	44,577	Vegetables, fresh.....	75,254	51,421
Leather goods.....	9,046	6,230	Wall paper.....	117,766	73,106
Linen goods.....	1,276,020	1,252,138	Wax, vegetable.....	1,919,640	114,774
Maize and millet.....		1,941	All other articles.....		2,046,790
Manganese.....	3,633				
Matches.....	2,416	1,965			
Medicines and drugs.....	22,422	23,386			
Metals and metal wares.....	1,000,234	1,720,852			
			Total.....	72,822,344	73,729,760

Shipments to American Insular Possessions.

The total value of the shipments to the Philippine Islands last year was \$3,524,500, against \$2,686,833 for 1910, and to Hawaii, \$2,273,641 and \$2,163,525, for the two years, respectively. Included in the total exports credited for the Philippine Islands were articles valued at \$87,074 from Yokohama destined for Guam, and consisting

principally of rice, provisions, cotton and silk goods, and porcelain. The following table shows the articles declared from the five consulates to Hawaii and the Philippines during 1910 and 1911, including charges on same:

Articles.	Hawaiian Islands.		Philippine Islands.	
	1910	1911	1910	1911
Antimony ware.....	\$460	\$361	\$453	\$888
Awabi.....	8,292	4,661	2,557	4,011
Bamboo and bamboo ware.....	15,548	21,960	10,846	12,524
Books.....	10,543	13,771	5,912	2,239
Braids, chip and straw.....	946	1,610	42,813	40,570
Brushes.....		158	3,879	3,609
Camphor and camphor oil.....	736	425	246	966
Cement.....			5,383	7,631
Coal and coke.....	8,882	6,608	729,849	983,178
Cotton and cotton goods.....	110,400	129,205	350,879	885,392
Curios.....	17,416	15,450	24,179	6,217
Fans.....				10,272
Furniture, screens, carved wood, etc.....	2,692	2,016	1,583	1,422
Glassware.....	396	792	50,776	54,593
Gut string.....				1,531
Isinglass, vegetable.....	1,125	255	6,035	3,218
Lacquered ware.....	2,578	2,188	2,228	2,260
Leather goods.....	160	829	25,979	30,891
Linen goods.....		3,012		30,448
Matches.....	354	1,284	14,898	16,055
Medicines and drugs.....	23,020	21,706	6,459	5,088
Metals.....	166	4,788	250	10,178
Mineral water.....	7	15	27,717	31,117
Mushrooms.....	3,696	2,845	1,401	3,397
Paper.....	5,253	4,371	3,568	3,958
Paper goods.....	6,998	7,571	7,129	7,846
Peanuts.....	3,497	5,612		34
Porcelain and earthenware.....	19,348	11,942	6,239	7,554
Provisions.....	348,833	403,161	42,814	27,985
Rice.....	742,549	883,690	14,727	454,745
Sake.....	93,659	96,001	464	628
Shoyu.....	97,564	94,567	396	213
Silk goods.....	71,032	49,296	139,978	196,685
Straw matting.....	12,889	12,133	1,704	1,313
Sulphur.....	51,556		981	716
Tea.....				
Green.....	20,027	21,591	916	839
Fouchong.....			15,011	15,707
Toys.....	3,841	2,866	11,775	14,568
Vegetables, fresh.....	27,570	33,590	230,916	219,178
Wax, vegetable.....			12,814	14,235
All other articles.....	451,482	413,308	383,036	440,789
Total.....	2,163,526	2,273,641	2,686,833	3,524,500

COAL MONOPOLY PROPOSED FOR ICELAND.

[From Chargé d'Affaires, American Legation, Copenhagen, Denmark.]

According to Isafold, a biweekly published at Reykjavik, the Althing (the local legislature of Iceland) has appointed a committee which is to prepare a plan for obtaining new sources of national revenue. The Althing especially charged the committee to devote attention to the advisability of establishing a monopoly on the import and sale of tobacco, coal, and petroleum.

Of these the coal monopoly is considered most important. The imports of coal into Iceland are said to be constantly growing, mainly due to the increased number of steam vessels fishing along the coasts, partly Icelandic and partly foreign vessels. Last year about 80,000 tons of coal were imported, and it is thought the amount will be greater next year. About half the coal imported is said to be used by foreign steamers. It is estimated that the revenue from a monopoly on coal would amount to about 100,000 crowns (\$26,800) from coal sold to foreign vessels alone.

FOREIGN WAREHOUSES FOR AMERICAN GOODS.

[From Consul Robert T. Crane, Rosario, Argentina.]

Investigations undertaken in response to an inquiry relative to the establishment of distributing stations and warehouses in connection with sales agencies for American products in South America and the existence of such facilities at present have disclosed that there are no enterprises of this character in Rosario nor anywhere in Argentina, and what was at first a feeling of distrust in the success of such a project has been changed into a confident belief in its entire feasibility.

The chief difficulties now appear to me to be not at this end but in the United States. The plan as outlined was simply one of warehousing at a point more convenient than the factories for a certain district and shipping out on orders received from, or rather through, the local sales agents of the manufacturers.

Local Difficulties for Solution.

Rosario is without doubt the best point in Argentina at which to locate a central depot, but there are several factors in the local situation which offer difficulties for solution. The most serious is that in this port, as in others of the Republic, the port privileges are granted to a private company for a long term of years. Among these privileges is that of warehousing all goods while within certain port limits, and there are no bonded warehouses in Argentina outside of these limits. On inquiry I am informed that it is unlikely that the privilege of bonding warehouses beyond the port limits would be granted, and yet there is, I am told, a possibility that such a concession might be made. Assuming that none can be obtained, however, there remain but two alternatives—to erect warehouses within the port concession, or to pay the duties and abstract the goods at once from the custody of the port company and of the customs authorities.

The concession of the water front at Rosario for 14 miles has been granted to a French enterprise, La Sociedad Anonima del Puerto del Rosario, which has expended about \$10,000,000 in improvements. The privilege of erecting warehouses within its confines depends not only upon the company but also upon the Federal authorities. Tentative inquiries lead me to suppose that there would be no opposition on the part of either, the sole question being one of compensation to the port company.

If the manufacturer were to pay the customs duties and remove goods from the port immediately, it is unlikely that any goods once shipped to Argentina would be sent elsewhere on account of the distances. The payment of the duty upon landing will only, therefore, lay upon the merchandise the additional burden of carrying the amount of the duty during such time as it remains warehoused. On some lines this would constitute a heavy charge, but on many others it would be extremely small; much of the agricultural machinery, for example, the most important of American exports to Argentina, is free of duty or pays about 5 per cent ad valorem.

Features of the Agricultural-Implement Trade.

As the trade in agricultural implements is the best organized here, and therefore in one way the least in need of the facilities under discussion, it is to it that I have gone chiefly for a test of the proposition. The agents for agricultural machinery have excellent facilities of their own in the shape of main depots and subsidiary deposi-

tories throughout the cultivated area of the country, and their methods of handling are up to date. Their feeling toward a warehouse under other management for the lines in which they deal is not on the whole favorable, and is, I believe, due solely to the feeling that such a company might undertake to sell as well as to store and ship.

.. If a supply can be maintained close at hand, the local dealer must inevitably draw upon it. The members of a firm here, which sells many thousand plows in a year, tell me that they are obliged to order in lots of 500 or 1,000, because they can not afford to meet drafts at 30 days' sight on larger consignments. The result is that, owing to irregular delivery, they are at times for months without a plow on hand; at the present moment they are unable to deliver a plow, although they have made sales of over 1,300. In all lines I am told there are frequently long periods when no delivery can be made on account of such interruptions to the steady supply of goods in small lots from the United States.

Success of Plan Rests with American Manufacturers.

But is there any possibility of inducing American exporters to carry a stock at such a distance? For those American manufacturers who seek only an occasional market abroad the scheme is obviously of no value, for they can not positively count upon the sale of their goods after arrival. For those manufacturers, on the other hand, who enjoy a regular market here for their products, who intend to maintain it by devoting to it the necessary portion of their output year by year, who intend, in short, to treat it as they would a home market, such facilities would be just as obviously of high value. But what proportion of the manufacturers of the United States are willing to deal with foreign markets as they are in the habit of dealing with their home markets? Fortunately or unfortunately there are a few of them so pressed for an outlet for their products as to be forced to view the export trade with the same intense seriousness of purpose that they put into their domestic business.

In spite of certain difficulties, then, it appears unquestionable that an enterprise of this nature would irresistibly attract the local merchants to a degree sufficient to insure its success, and would facilitate trade with the United States.

HUNGARIAN STATE AID TO INDUSTRIES.

[From report of British consul at Budapest.]

Ten factories were established in 1911 with State assistance, and the further development of 15 others was assured; these establishments represent \$3,248,000 capital, and give employment to at least 3,700 workmen. In addition, 36 factories received machinery to the value of nearly \$100,000 on condition of employing 1,150 new workmen. Some 67 factories received State assistance in the form of freedom from taxes, etc. In the case of 20 factories exemption from taxation was prolonged, and a similar privilege was granted in favor of 19 factories, the erection of which is contemplated. In all, State aid to industry during 1911 represents \$9,135,000, and has given employment to 7,700 workmen. A good deal has been done by the Government to encourage the smaller industries. Machinery has been granted to the value of \$18,000, and an experimental institution has been established for making experiments and examining materials likely to develop the smaller industries. The Minister of Commerce is also engaged in studying methods of reducing distress among the working classes. Further, the development of the use of water power in Hungary is engaging the attention of the authorities, and the work of the commission occupied in considering a reform of the industry law "Gewerbe Gesetz" is stated to have made progress.

CANADIAN PURE-FOOD PROCEDURE.

[From Consul Felix S. S. Johnson, Kingston, Ontario.]

Certain provisions concerning the adulteration of foods were added to the Canadian inland-revenue act in 1868 as an amendment and passed. As this was the foundation of all later acts a summary of the provisions may be interesting.

Analysts were appointed in Halifax, Montreal, London (Ontario), St. Johns, Toronto, and Quebec. The inland-revenue officers were to collect samples of goods suspected to be adulterated and submit them to the analysts. On receiving a certificate that these suspicions were well founded they were to seize and destroy the goods. The analysts were to report quarterly to the Minister of Inland Revenue at Ottawa, who was to present the results to Parliament annually. Dealers were obliged to give samples whenever requested, and the penalty for selling adulterated food was \$100 on the first conviction and \$200 for a subsequent offense. A manufacturer was to be fined \$100 for a first offense and upon a second conviction was liable to six months' imprisonment.

The adulteration act of 1884 is in force to-day. It was amended in 1888, 1890, 1896, and 1900, but the changes were comparatively unimportant, being principally definitions. The new act provided for the appointment of a chief analyst, who was to be attached to the staff of the Inland-Revenue Department at Ottawa. He was to be a final arbitrator whenever a question arose as to the correctness of any analyses made by a local analyst. He was to supervise generally the work of the laboratory of inland revenue and prepare from time to time bulletins setting forth the results of the collection of samples. These were to be issued to the public and contain the names of the venders from whom the inspectors obtained samples, as well as names of manufacturers when possible. The exact condition of each article examined was to be shown, together with the opinion of the analyst regarding the purity and fitness for the purpose for which it was sold. In all, 231 of these bulletins have been issued in 27 years.

Fines—Warranties of Purity—Standards.

When adulteration is found, the procedure is similar to the English practice. The Minister of Inland Revenue, acting on information, may order a collection of the articles suspected to be adulterated, and these samples are bought and paid for in the usual way by inland-revenue inspectors. If they are found to be adulterated under the meaning of the act, the seller is obliged to pay a sum ranging from \$8 to \$14 to cover the cost of the analyses. This is not a fine, and has to be paid in any event. The fact being thus established, the Government may bring an action in the ordinary courts of the district in which the adulterated goods were sold. If the action is successful, the fine is \$5 to \$200 for a first offense, and a fine or imprisonment, or both, for a subsequent conviction.

In 1898 an amendment provided the retail dealer with an additional safeguard in the form of warranty of purity. If the vender can produce this, the action is shifted to the giver of the warranty, but the warranty does not relieve the retailer from paying the costs of analyses.

A clause provides for fixing standards of purity. These may be established by the Governor General in council at any time and have the force of law at the expiration of 30 days. The chief analyst prepared a complete set of provisional standards and submitted them to the manufacturers and importers for criticism and approval. Some of these have since become law by an order of the Governor General in council; they cover milk and milk products (1910), grain products (1911), meats (1910), and beverages (1911). Others covering baking powder, flavoring extracts, jams, and cream of tartar are in course of preparation.

SENDING TRAVELERS TO VENEZUELA.

[From Consul Thomas W. Voelter, La Guaira.]

A New York firm makes inquiry as to whether it would be advisable to follow up its catalogue campaign with a special traveler, carrying a full line of samples.

In reply I can do no better than quote from a letter recently received from the American consular agent at Ciudad Bolivar, a Venezuelan port on the Orinoco River. This agent is a member of one of the leading mercantile firms in that section and is conversant with the needs of the trade as well as the needs of the people and their conditions. He states:

There is no doubt that this is an ever-increasing market for American goods, but the manufacturers must fight for it. Year after year European manufacturers send out their traveling agents with a line of samples. Very few Americans come here * * *. In some cases the styles, designs, or quality would have to be changed to suit the different districts of Venezuela, but a live man would soon catch on. A line of goods that would sell well in all Venezuela is American hardware, locks, and tools, much more so if they are light, as duties are collected on the weight (gross), and if prices compare favorably with the heavier English goods.

From the above extract concerns in the United States may judge that one merchant would be very glad to welcome American travelers with samples. I would advise that the Orinoco Valley be not neglected in any campaign in this country, as not only are the needs of a large section of the country supplied through it, but the southeastern part of Colombia as well, due to the navigability of the Apure, one of the western branches of the Orinoco.

If the expense of sending a traveler seems great, he might also represent other American manufacturers at the same time, preferably those who manufacture allied but not competing lines, such as saws, axes, edged tools and such a line of hardware as would be adapted to an agricultural or stock-raising country.

With the high price of coffee the people have more money at their disposal than in former years, and imports are increasing, the present would not be a bad time to make an earnest effort to get a share of this increased trade.

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.

CREDITS FOR RUSSIAN TOWNS AND ZEMSTVOS.

[From Consul General John H. Snodgrass, Moscow.]

There is now pending in the Duma a bill regarding credits for towns and zemstvos. [For an article relative to Russian zemstvos see Consular and Trade Reports dated Apr. 2, 1910.] It has been proposed to allow credit in two ways: Through the assistance of a Government cash office for municipal credit and by loans of money from land banks granted without mortgage security.

The foundation (reserve), as well as the floating (working) capital, of the cash office, amounting to \$5,000,000 each, is to be deposited by the Government treasury, not in cash but in bonds or stocks. Loans will be made by bonds of short as well as of long duration, the total amount issued not to exceed \$50,000,000 (ten times the amount of the foundation capital). Loans for a long period are granted only for those constructions and improvements which require the investment of a large sum of money exceeding the usual means of the towns and zemstvos, such as canalization, waterworks, roads, etc. Short-term loans may be negotiated to meet current expenses.

The question of credit for towns and zemstvos has been thoroughly discussed by the press. The necessity for the organization of municipal credit is universally recognized; there is difference of opinion only in regard to the methods. The best system is considered to be that of mutual credit, to which preference has been given by a majority of the Russian towns and zemstvos that planned the organization of a Russian Society of Mutual Credit. This system would have the advantage of bearing a communal character, and not a bureaucratic one. The towns and zemstvos would be independent in the distribution of credit for their local needs, which would not be the case with a Government cash office.

The Pros and Cons of the Plan.

In the discussion which has attended the consideration of this subject it has been pointed out that in granting long-time loans a Government cash office would investigate not only the financial position of the town or zemstvo, but also the extent of the necessity or utility of the construction in question. Therefore the operations of the towns and zemstvos would come under the control of the cash office, or rather under the control of the Minister of Finance, to whom the cash office will be subordinated.

In the planned organization of a mutual credit society it was proposed that the association should have the right of issuing bonds. As opposed to this it is shown how important it is for the Minister of Finance to keep the right of issuing bonds in his own hands for the regulation of the money market and the course of Russian notes; but it is claimed that in the issuance of bonds the minister must of necessity give more consideration to financial conditions and to the state of the Government treasury than to the requirements of the towns and zemstvos seeking loans. If it would be required at the same time to issue bonds for the towns and zemstvos and for other purposes (such as Government loans, railways, etc.), preference would always be given to the latter.

Lastly, the limitation of credit operations to \$50,000,000 does not meet the requirements of the towns and zemstvos to their full

extent. There are about 50 Government zemstvos in Russia and as many large towns. Therefore the credit for each of them is limited to \$500,000, while the expenses of some towns regarding such public utilities as waterworks, tramways, canalization, etc., would necessitate the loan of several million dollars. It is evident, therefore, that a credit of \$50,000,000 will prove insufficient to meet the requirements of the larger towns, while there are, besides, the district zemstvos and the smaller towns still more in need of credit.

Land-Bank Loans without Mortgage Security.

The Government feels that the establishment of a cash office along the above lines does not solve the question of credit for towns and zemstvos, and therefore has prepared another project, according to which private land banks would have the right of making long-term loans without mortgage security. This considerably extends the scope of credit and alleviates the situation.

Unless the limitation of credit operations be increased, it will be necessary for the provincial cities to look to outsiders for assistance in floating their loans for municipal improvements. A number of the mayors have written this office requesting to be placed in communication with American financiers who might be induced to underwrite their proposed loans.

Russian credit banks.—Supplementing his report on mutual credit banks in the Russian Far East that appeared in Daily Consular and Trade Reports on January 27, Consul John F. Jewell, of Vladivostok, has forwarded copies (in Russian) of the by-laws of the Vladivostok Society of Limited Mutual Credit and of the Vladivostok Commercial Society of Mutual Credit. These pamphlets are on file in the Bureau of Manufactures.

NEW FRANCO-JAPANESE BANK.

[From American Ambassador Charles Page Bryan, Tokyo.]

Negotiations for organizing the Franco-Japanese bank [noted in Daily Consular and Trade Reports for Apr. 17] have practically been concluded, and Mr. Soyeda, president of the Industrial Bank of Japan, is leaving for Paris to arrange the details of the contract and articles of association.

The organization will be in the nature of a syndicate, the Japanese shares to be held by the Industrial Bank, and the French by the Société Générale, Banque de Paris, Comptoir National d'Escompte, Crédit Foncier, and l'Union Parisienne.

The syndicate will be capitalized at \$5,000,000, the Japanese putting up \$2,000,000 and the French \$3,000,000. The head office will be located in Paris and the branch in Tokyo. The business of the branch bank will probably be conducted by the Industrial Bank. The Parisian banks will keep a specie deposit in the Tokyo office.

The new organization will carry on an ordinary banking business, including exchange and loans. It will also have the power to issue debentures and act as promoter in various kinds of enterprises. Its fundamental purpose is to facilitate the introduction of French capital in the industrial development of Japan.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8898. Wood handles and hardware.**—An American consular officer in the United Kingdom reports that a resident of his district has expressed a desire to obtain agencies for American makers of wood handles of all descriptions and for manufacturers of hardware.
- No. 8899. Machinery for rubbing or polishing stone.**—A firm in England engaged in stone quarrying has informed an American consulate that it would be very much interested in any improved machinery for rubbing or polishing stone. Correspondence should be sent direct to the firm.
- No. 8900. Woolen and cotton materials for ladies' blouses and robes.**—A report from an American consular officer states that a manufacturer's agent in his district desires to enter into negotiations for the purpose of obtaining agencies for American printers of woolen and cotton materials suitable for the making of ladies' blouses and robes. The inquirer states that he has first-class connections with important buyers of these materials and is already doing a large trade for several important Continental manufacturers. References will be furnished.
- No. 8901. Raw asbestos and asbestos rings and packing.**—An American consul in the United Kingdom reports that a firm in his district manufacturing asbestos desires to receive quotations on raw asbestos. Another firm of asbestos merchants desires to purchase asbestos rings and packing.
- No. 8902. Telephone equipment.**—The American consulate general at Sydney, Australia, has forwarded copies of tender forms, specifications, etc., covering various telephone supplies, such as switchboards, associated apparatus, etc., issued by the Postmaster General's Department of the Commonwealth of Australia. Copies of the papers referred to will be loaned to interested firms by the Bureau of Manufactures. All the tenders covering these supplies close July 31, 1912.
- No. 8903. Shoes, hides, cotton goods, kitchen utensils, etc.**—The Bureau of Manufactures is in receipt of a communication from a business firm in the United States inclosing a letter from a firm in Turkey requesting to be placed in communication with shippers of the following articles: Hides and skins, boots and shoes, cotton goods, kitchen utensils, and any other article which could be advantageously used in that country. The foreign correspondent furnishes references.
- No. 8904. Dredging.**—The American consulate general at Ottawa, Canada, reports that the Department of Public Works has advertised for bids, to be received until June 4, 1912, for dredging required in Toronto Harbor, Ontario, and Miami Bay, New Brunswick. Combined specification and form of tender can be obtained on application to the secretary of the Department of Public Works, Ottawa. Dredges and tugs not owned and registered in Canada can not be employed in performing the work.
- No. 8905. Machinery and tools.**—An American consular officer in a European country reports that the manager of a firm in his district has expressed a desire to be put in communication with some competent American manufacturers of machinery and tools with a view to representing such firms. This firm is said to be in good standing and the manager is energetic and will probably be able to do good business for manufacturers in the above-mentioned lines.
- No. 8906. Waterworks material.**—The American consulate general at Vancouver, British Columbia, reports that tenders will be received by the City Clerk, Vernon, British Columbia, until June 10, 1912, for supplying 17,000 feet of 4-inch cast-iron pipe and 10,500 feet of 6-inch cast-iron pipe; also 125 gate valves and 36 hydrants ranging in size from 4 inches to 8 inches. Specifications can be obtained from the City Engineer's Office, City Hall, Vernon, British Columbia, Canada.
- No. 8907. Rubber.**—An American concern owning two large rubber plantations in the Straits Settlements desires connections with crude rubber buyers in the United States.

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TARIFF SYSTEM OF PERU.

[By Commercial Agent Frank R. Rutter.]

Customs Tariff.

The present customs tariff of Peru, which became effective July 1, 1910, prescribes specific rates of duty for nearly all imports. It replaced a schedule of ad valorem duties, assessed on fixed official valuations. In effect, the old tariff was equivalent to one of specific duties in the case of all articles included in the schedule of official valuations, but for a considerable number of articles no official valuations were provided. The simplification of the system which resulted from eliminating the unnecessary list of official valuations was in response to a general demand on the part of the importers, and is in accord with the general tendency in South American tariff legislation. While on certain articles the rates of duty were lowered, the general effect of the revision was to increase the rates. The average ad valorem duty on all imports in 1908 was 21.4 per cent, in 1909, 24.2 per cent, and during the first six months of 1910, 21 per cent, as compared with 25.4 per cent for the last half of 1910 under the new tariff. In 1911 the customs receipts show a gain of more than 20 per cent over 1910, but the statistics of importation have not yet been published. Returns for Iquitos, which was not subject to the regular schedule of import duties until October, 1910, have been excluded from the foregoing comparisons.

Additional Charges.

Although not mentioned in the new tariff law, the surtax of 8 per cent of the duties, prescribed by law of November 18, 1892, is still in force at all ports of the Republic. Imports at Callao, Salaverry, and Paita are subject to a further surtax of 2 per cent of the duties for municipal funds. The proceeds from the 2 per cent surtax at the three ports are not included in the customs receipts. One-half of the amount collected at Callao is by law of January 8, 1896, destined for the water supply and sewerage of that port, and, when sufficient funds for that purpose have been collected, may be used for paving, by virtue of the law of August 22, 1907; the other half is turned over to Lima, according to the law of September 30, 1903, to

pay for a municipal theater. The amount collected at Salaverry, by virtue of the law of October 26, 1906, is to be used for the water supply and sewerage of Trujillo, and that collected at Paita,¹ by law of November 16, 1906, for the public works of Piura. The 8 per cent surtax is, on the contrary, included in the customs receipts and in the averages quoted above. This surtax, which has now been in force nearly 20 years, is destined for the payment of interest on the national debt.

Landing Charges.

At Callao the docks were constructed by a French company known as the *Empresa del Muelle y Dársena*. By a contract entered into with the Peruvian Government May 5, 1887, this company was granted exclusive control of the loading and discharge of cargo for a period of 25 years. For discharging cargo from vessels, whether lying at the dock or anchored in the harbor, the company charges a fee of 2.42 soles² per ton; for certain articles this fee is collected by weight (per ton of 1,000 kilos), while for other articles it is collected by measurement (per cubic meter). In the case of a few articles specific rates are charged in lieu of the ordinary fee for discharging. The contract with the dock company has been modified from time to time, and unless a new contract is made, the monopolistic feature will expire in May, 1912. Thereafter steamship companies and importers, in the absence of a new contract, will have the legal right to disembark cargoes at their own expense, but unless new public docks are built or those owned by the company are purchased by the Government, the general right to perform the service of loading or unloading merchandise will not be of practical utility to shippers or importers.

At most of the other Peruvian ports the docks are similarly owned by private companies. In all cases, however, the schedules of charges have been approved by the Government and compare favorably with those in force in other countries on the west coast of South America.

Warehousing.

The customs warehouses at Callao are, since January 1, 1911, under the direct control of the customhouse. No charge whatever is made on articles entered for consumption within eight days after landing.³ Beyond that free period, the charge for warehousing in the case of dutiable imports is 1 per cent of the ordinary duties for the first 30 days (which need not coincide with the calendar month) and two-thirds of 1 per cent for each additional month. On articles free of duty the warehouse charge is 5 centavos per 100 kilos for the first 30 days and 3 centavos for each subsequent month. After three years goods not claimed by the consignees are sold at public auction, the proceeds above the amounts due to the customs being subject to the order of the consignee.

Preliminary to warehousing an inventory is made of the contents of each package, for which a fee of 5 soles is collected. If a consignment consists of a number of similar packages the fee of 5 soles is

¹ In the case of Paita, fiber for straw hats (*paja toquilla*) is exempt from the 2 per cent surtax.

² In the Peruvian monetary system the pound = 10 soles = \$4.8665; sol = 100 centavos. Kilo = 2.2046 pounds avoirdupois. Meter = 39.37 inches.

³ The extension of the period during which no charge is made for warehousing to 30 days in the case of imports in ships of the Peruvian Steamship Co., in return for an annual payment of 600 pounds, was granted by decree of Feb. 28, 1912, in effect Mar. 1. (*Boletín de Aduanas*, Mar. 9, 1912, p. 173.)

charged only for one package, and 20 centavos for each of the remaining packages in the consignment.

Warehouses are also maintained at Mollendo, Paita, and Iquitos, where the same charges are in force as at Callao. At those ports, however, the maximum period of storage is fixed at two years.

Special warehouses for cereals at Bellavista, about $2\frac{1}{2}$ miles from the docks at Callao, and for explosives at San Lorenzo, an island in the harbor of Callao, are maintained, both under control of the National Salt Co. The inconvenient location of the former and the poor facilities at the latter are criticized in the report of the general superintendent of the customhouse of Callao for 1911.

Dutiable Weight—Packing.

Duty is levied in the case of certain articles on gross weight, in the case of other articles on "legal weight," which includes the immediate container but not the outer receptacle, and, when no other method is indicated in the tariff, on net weight. For articles dutiable by gross weight and, to a less extent, articles dutiable by legal weight, care must be exercised to minimize the weight of the packing as far as is consistent with safe carriage. At the same time, it must be continually borne in mind that shipments are subject to rough handling; transshipment is often necessary; and for large regions in the interior the only means of transportation is the pack animal. To preserve and increase trade with Peru it is essential that consignments arrive in good condition and, to this end, the instructions of the purchaser in respect to packing must be followed literally. If too heavy cases are used, the importer incurs unnecessarily heavy import duties; if too light, the goods are liable to be damaged. The same considerations apply even in respect to articles dutiable by net weight. For unless either the importer or the customs authorities demand the actual weighing of the goods after the removal of the packing, the duties are levied on the gross weight, with a fixed allowance for tare, according to the kind of packing employed.

Containers are liable to duty separately only when of an unusual kind or when dutiable at a higher rate than the contents. When the same package contains goods dutiable by gross weight and also goods dutiable on some other basis or at some different rate, the actual weight of the former, including their own immediate containers and the proportionate amount of packing (sawdust, excelsior, etc.) is increased generally 25 per cent, while in the case of bedsteads and pianos an increase of 60 per cent is provided for.

Dutiable Value.

While the great majority of articles specified in the tariff are liable to specific rates of duty, for some 20 or 25 articles ad valorem rates of duty are provided. Articles not specified in the tariff and not capable of assimilation to articles so specified are subject to a duty of 30 per cent "of their wholesale value at the customhouse. The value will be determined by means of the original invoices or any other information available to the customs office. This duty shall be of a provisional character until the specific rate applicable has been established." (Customs law, art. 51.) In actual practice, lists of prices, based in part on the former schedule of valuations and in part on invoice values of similar articles previously imported, are kept on file by the customs authorities and are used as a check on the values

declared in the invoice. The same rule is followed in determining the basis for calculating the few *ad valorem* duties prescribed in the tariff, with the exception of patent medicines, on which the duty is 25 per cent of the list price. In regard to new patent medicines, not named in catalogues, the duty is based on the invoice price.

Classification of Articles.

Articles not specifically named in the tariff, when composed of more than one material, are classified under the material liable to the higher rate of duty. The original determination of the rate of duty applicable to an importation is made by a customs inspector, known as the *vista*, from whose decision appeal may be taken first to the General Superintendent of Customs, then to the Board of Customs (*Junta de Arancel*), composed in part of representative business men not connected with the customs service, and finally to the Minister of the Treasury. In law an appeal from the Minister of the Treasury to the courts is provided for, but in practice the decision of the minister is final. Each decision in respect to classification has the force of law and is communicated to the other customhouses, so as to prevent variations in practice.

As an example of the procedure followed, the case of lard substitutes may be cited. While not specifically named in the tariff, lard substitutes had for many years prior to September, 1910, been classified as lard. The Superintendent of Customs then decided that only pure lard was entitled to the low rate of duty provided for "lard" and that lard substitutes were dutiable at 30 per cent *ad valorem*. His decision was reversed by the Board of Customs, but was reaffirmed by the Minister of the Treasury. The result was to cut off the importation of lard substitutes. The determination of the chemical composition of shipments presented for importation became necessary. To avoid the delay of the chemical analysis of lard on its arrival in Peru, an official certificate from the United States Department of Agriculture should be obtained and should be viséed by a Peruvian consul. [The Bureau of Manufactures has been informed that the certificate accompanying shipments of lard may be viséed by the Peruvian consul in the United States or by the United States consul in Peru, at the option of those interested.] This is especially important in the case of shipments to the smaller ports, where no chemical laboratory is maintained, and from which, in the absence of an official certificate, samples must be sent to Callao for analysis.

Revision of the New Tariff.

The new tariff, as has been pointed out, met the desires of importers in replacing by simple specific duties the system of *ad valorem* duties calculated on officially assessed values which had been in force ever since the colonial period. The effort was made to fix the duties on as large a number of articles as was possible—many more than had previously been included in the schedule of valuations—and in making such a complete revision of the tariff some ambiguities could scarcely be avoided. By decree of April 19, 1911, a commission was designated, composed of representatives of the customs service, chambers of commerce, and prominent importers, to recommend necessary changes in the customs tariff. After a few months of careful study the commission made its report. While no new tariff

based on these recommendations has yet been submitted by the Government to Congress, a new edition of the current measure, with explanatory notes, was authorized on January 4, 1912.

Commercial Travelers and Samples.

Since December 31, 1910, samples of merchandise when possessing intrinsic value must pay the ordinary duties specified in the tariff, which are not refunded on the reexportation of the samples. Prior to that date bonds were accepted and were canceled upon proof that the samples had been shipped out of the country. It was claimed that in some instances articles of inferior value had been substituted for those originally introduced, and to prevent such abuse the privilege of temporary admission was withdrawn. The result of the present practice, from which it is said some specific exceptions have been made, is to render extremely difficult and expensive the canvassing of the Peruvian market. If the salesman wishes to show samples of his merchandise, he must either lose the whole of the duties he has paid or else dispose of his samples to local dealers before leaving the country. The latter alternative is rendered less desirable because Peru is situated halfway up the west coast, and is therefore not a convenient place to terminate a journey.

There is no national tax on commercial travelers, but local taxes are imposed by some towns and districts. Thus in Arequipa a fee of about \$12 quarterly is required.

Imports by Mail.

Articles imported by parcel post are naturally subject to the customs duties and surtaxes, but avoid the charges of the dock companies and the commissions exacted by customs brokers. Advertising matter when imported in bulk is subject to duty, but catalogues mailed in single copies are admitted free. A rebate of one-fourth of the ordinary duties is allowed on advertising novelties if not salable and if containing prominently and indelibly an advertising notice.

Internal Revenue and Monopolies.

The collection of internal-revenue taxes is intrusted to the *Compañía Nacional de Recaudación*, a private corporation, which turns over the proceeds, less a fixed allowance for expenses and a small commission, to the Government. The same company also operates the opium monopoly and the recently instituted tobacco monopoly, but the salt monopoly is distinct. The importation of articles subject to monopoly is prohibited on the part of private persons. Playing cards, alcohol and alcoholic beverages, matches, and sugar are liable to internal-revenue taxes in addition to the customs duties. Municipal and provincial taxes are not applicable to imports arriving direct from foreign countries.

Export Duties.

The only articles subject to export duties in Peru are crude silver, straw hats shipped from Paíta, and all kinds of rubber or similar gums. In 1910 these duties produced about 5 per cent of the total customs receipts. Practically the whole amount was collected at Iquitos and Mollendo. On July 1, 1911, a rate of 8 per cent ad valorem on

rubber and other gums went into effect, but no statistics showing the proceeds at Iquitos, the principal rubber port, are yet available for 1911.

Customs Practice at Callao.

It may be of interest to describe briefly the various steps incident to entering merchandise for consumption.¹ As soon as the incoming ship has satisfied the requirements of the health officer and the captain of the port, a customs inspector examines the manifest and supervises the discharge of the merchandise. Packages in bad condition are inventoried by customs officers and representatives of the steamship company jointly. In case any package named in the manifest is missing, the steamship company is held responsible and must pay the corresponding duties, if the package is one of a uniform consignment, or if not, a fine of 100 soles. When a package is not included in the manifest, a supplementary declaration is required on paper bearing a 5-sol stamp.

The discharge of the cargo is made by the dock company. Packages containing machinery, heavy packages, and articles free of duty may be dispatched directly from the dock; others are conveyed to the provisional warehouses, where they are held for eight days without charge, pending the application of the importer for their entry for consumption or deposit in the permanent warehouses. In the absence of such application within the specified period an inventory of the contents is made at a cost of 5 soles per package, or in the case of a uniform shipment, 5 soles for the first and 20 centavos for each remaining package. When an inventory is made at the request of the importer, the fee is 1 sol for each package weighing not more than 99 kilos and 2.50 soles for each package of greater weight. As soon as merchandise has been examined and classified it is transferred to the warehouse of goods for immediate consumption, and if not removed by the owner within 48 hours (exclusive of holidays) is liable to three times the ordinary charge for storage.

For goods deposited in the general warehouses a warrant is issued by the customs, specifying in detail the contents and the duties. The warrant is transferable upon notice to the customs. Goods may remain in the general warehouses at Callao for three years, but after that term are sold at public auction. When goods are consigned to order the consular invoice or the bill of lading must be presented, and in all cases the receipt of the steamship company and of the dock company is required to prove the payment of the freight and of the unloading charge. There are at present no bonded customs agents at Callao and goods may be entered directly by the importer. There is, however, no provision for transportation in bond, except for goods in transit to Bolivia, and goods, even when consigned to importers living in the interior, must be entered at the ports by agents of the importers.

Articles misbranded are not excluded from importation into Peru, but must pay the duty corresponding to the article named on the label if higher than that to which the substance itself would be liable.

¹ This account is based chiefly on an interview with Mr. Felipe Derteano, Chief of the Division of Clearances (Director de Despacho) in the Callao customhouse, supplemented by a memorandum prepared by Mr. Derteano.

TRADE IN MALTA.

[By Consul James Oliver Laing, Valetta.]

The depression in the trade of Malta which has been noticeable in the last four or five years continued during the fiscal year 1910-11. One of the causes of this depression is the reduction of the British naval and military establishments in the islands, the number of men connected with the warships alone having declined from 18,000 or 19,000 to about 8,500. This and the change in the army causes a total loss in trade of about \$1,450,000 annually. Unless this trade is brought back to Malta it is likely that the depression will continue.

The island of Malta itself has a civil population of 190,741 and an estimated acreage of 46,602. Some 41,800 acres are under cultivation, but much of this is poor land which would not be cultivated in the United States, and which produces rather poor crops, although good crops are raised on the better ground. The other large island of the Maltese group, Gozo, has a population of 22,654.

Owing to a change in the method of keeping the trade statistics, no comparison of last year's trade with that of the year before is possible. The trade with various foreign countries for the fiscal year 1910-11 is shown herewith and for the sake of comparison that for the last six months of 1909-10:

Countries.	Imported from—		Exported to—	
	Last six months 1909-10.	1910-11	Last six months 1909-10.	1910-11
United Kingdom.....	\$2,342,859	\$4,710,990	\$110,070	\$516,764
Australia.....	41,739	163,903	886	1,932
India.....	37,457	26,945	.....	101,432
Austria-Hungary.....	234,949	451,066	32,474	212,836
Netherlands.....	113,302	92,448	.....	91,804
Egypt.....	130,271	521,152	471,651	506,009
France.....	248,844	409,881	55,877	107,729
Germany.....	129,094	246,055	55,264	57,337
Greece.....	158,512	325,637	32,250	77,430
Italy.....	620,853	1,107,898	219,289	361,542
Russia.....	708,042	1,623,147	2,195	5,927
Tunis.....	111,623	231,382	20,332	64,520
Turkey.....	432,836	611,943	36,600	57,093
Tripoli.....	177,252	305,226	44,397	105,281
United States.....	125,624	280,388	2,939	754
Other countries.....	91,156	355,267	40,868	125,259
Ships' stores.....	.....	2,355	828,525	1,808,137
Total.....	5,704,413	11,465,683	1,953,597	4,201,876

Trade in American Goods.

American goods imported into Malta during the fiscal year 1910-11 amounted to \$280,378; the principal items being fish, \$6,521; flour and semola, \$17,791; lard, \$57,711; meats, \$1,829; cottonseed oil, \$91,261; petroleum, \$69,712, and unmanufactured tobacco, \$29,150. These figures, however, are not representative of the true imports of American goods, as shipments here are credited to the country of the port from which they enter Malta. Thus cottonseed oil made in the United States and sent here via Naples is credited to Italy. There are in reality probably \$600,000 worth of American produce imported annually, many American manufactures being purchased by English and Continental merchants, who resell them here. A

hundred or more articles are to be seen in the shop windows, which are readily recognized as of American manufacture.

Aside from bullion and specie and the materials used on shipboard, the imports are largely made up of foodstuffs and wearing apparel. The following list shows the value of the principal articles:

Articles.	Last six months 1909-10.	1910-11	Articles.	Last six months 1909-10.	1910-11
Beer.....	\$104,103	\$198,470	Meats.....	\$140,427	\$325,091
Biscuits.....	15,319	33,758	Metal manufactures.....	178,328	408,586
Books and stationery.....	39,691	62,628	Milk, condensed and preserved	43,594	75,907
Boots and shoes.....	23,057	54,406	Oil:		
Bullion and specie.....	128,353	54,485	Edible.....	123,638	279,779
Butter and butter substitutes.	68,768	174,721	Petroleum.....	72,126	224,627
Cement.....	13,494	25,987	Other.....	8,657	26,804
Charcoal.....	45,774	105,797	Paints and colors.....	21,879	40,475
Cheese.....	96,375	185,121	Paper.....	24,547	55,497
Coal, coke, and patent fuel....	770,099	1,677,424	Pickles, sauces, and condiments.....	31,710	43,317
Cocoa and chocolate.....	20,570	40,572	Potatoes.....	118,572	125,180
Coffee.....	56,319	85,882	Pulse.....	196,480	379,606
Drugs, chemicals, etc.....	24,813	54,791	Rice.....	15,299	39,856
Earthen and china ware.....	33,364	50,781	Seeds.....	102,994	134,002
Electrical goods.....	14,536	19,490	Spirits.....	74,695	121,619
Fish, fresh and preserved.....	128,027	162,458	Sponges.....	6,919	22,711
Fruit.....	83,689	94,740	Sugar.....	197,210	372,302
Furniture and cabinet ware....	13,772	31,651	Tea.....	58,565	80,049
Grain:			Textile manufactures.....	390,303	781,117
Wheat.....	681,255	1,504,765	Tobacco:		
Other.....	54,100	122,202	Unmanufactured.....	76,700	142,442
Flour and semola.....	201,998	275,945	Manufactured.....	118,100	86,896
Haberdashery.....	59,089	40,659	Vegetables.....	18,341	32,678
Hats and caps.....	15,981	29,914	Wine.....	182,876	346,742
Hosiery.....	23,425	40,893	Wood and timber.....	25,651	79,996
Lard.....	62,534	116,528	All other articles.....	405,283	902,243
Leather manufactures.....	29,948	78,963			
Live stock.....	269,277	501,166	Total.....	5,704,413	11,465,683
Matches.....	13,738	22,575			

Domestic Produce and Other Goods Exported.

The chief articles of export produced on the islands are cheese, cumin seed, potatoes, hides and skins, and tobacco manufactures. The value of the principal articles of domestic produce and of other goods exported in the periods mentioned were as follows:

Articles.	Last six months 1909-10.		1910-11	
	Domestic produce.	Other produce.	Domestic produce.	Other produce.
Bran.....			\$26,225	
Bullion and specie.....		\$472,488		\$866,786
Cheese.....	\$25,091	7,323	31,924	10,487
Cinematograph films.....		26,220		109,067
Coal, coke, and patent fuel.....		823,737		1,804,537
Cotton (raw).....	36,664		21,563	87
Cumin seed.....	51,166		109,077	
Potatoes.....	62,914	759	329,130	1,086
Flour and semola.....	22,424	287	36,886	491
Hides and skins.....	47,092		92,015	463
Live stock.....	5,644	10,628	12,870	10,190
Metal, old.....	133,468		82,676	
Tallow.....	7,197		24,439	
Textile manufactures.....	26,186	8,214	53,083	32,479
Tobacco manufactures.....	36,770	11,397	96,833	10,380
All other articles.....	2,270	140,198	96,524	340,660
Total.....	452,346	1,501,251	1,015,195	3,186,681

The amounts of the articles given in the table of exports as going to the United States are not accurate, as many goods are shipped there by way of other ports, to which they are credited in the statistics.

Invoice records of this consulate show that in the fiscal year 1910-11 lace goods valued at \$439 were exported to the United States, \$666 to Manila, and \$161 to the Canal Zone, and tobacco valued at \$152 and cumin seed at \$1,582 were shipped to the United States. Lace goods are usually shipped by parcel post.

Vessels entering Malta in the year 1910-11 numbered 3,059 of 4,337,736 tons. Of these 1,026 of 2,399,939 tons were British, 787 of 313,924 tons Italian, 397 of 890,793 tons German, and 508 of 393,698 tons Austrian.

AUSTRALIAN COMMERCIAL NOTES.

[From Consul General John P. Bray, Sydney.]

San Francisco-Australian Mail Line.

The agent in Sydney of the Oceanic Steamship Co. (Spreckels Line), of San Francisco, notifies this consulate:

I have a cable from Messrs. Spreckels instructing me to officially announce the first departure of the Oceanic steamers from San Francisco on July 2 next, and the first departure from Sydney on the 27th of the same month.

In accordance with the above I have notified the consular officers in Australia of the contemplated renewal of the mail service between Sydney and San Francisco.

Big Shipping Tonnage.

The shipping tonnage at Sydney Harbor is steadily increasing. It is probable that the record for daily arrivals at this port was broken on April 1 when 9 big over-sea and 10 interstate steamers, representing 80,964 tons of shipping, arrived. In view of the increase proposed by big over-sea companies in the tonnage of vessels, some of which will be up to 18,000 tons, it is probable that this record will soon be exceeded. There were also in the harbor on April 3 more than 40 other vessels of a tonnage of 130,399, exclusive of warships, New Zealand, and interstate boats.

Australia-New Zealand Cable.

A tender has been accepted by the Pacific Cable Board for laying a direct cable line to Auckland, New Zealand (as indicated in Daily Consular and Trade Reports for Jan. 22, 1912), and it is anticipated that the cable will be in operation before the end of 1912. The line will be laid from a point near the Sydney Heads to Nuriwai, New Zealand.

Australian Wines.

At the Australian Royal Agricultural Show at Sydney, which closed in April, the exhibit of native wines was particularly noteworthy. For a number of years the wine industry and the quality of Australian wines have been steadily improving. This year experts agree that the quality of the wines is the best ever exhibited at the royal show. The Herald, in commenting upon this, laments the fact that Australia is a spirit, instead of wine, drinking country. It attributes the fact to the influence of English customs upon the people, as it points out that Australia is climatically a wine-growing and a wine-drinking country. It compares Australia to the southern countries of Europe, and hopes and recommends that the people here will follow the example of the people there and make light wines a national drink, and points out that great advantage will accrue from this financially by encouraging a valuable home industry, and physically and morally to the benefit of the people. There seems, however, to be no prospect of such a change in the immediate future.

PINE LANDS OF NICARAGUA.

[From Consul Arthur J. Clare, Bluefields.]

The pine belts on the Atlantic coast of Nicaragua extend north from the Rio Grande along the 84th meridian, west longitude, following the coast line into Honduras, and vary in width from 10 to 30 miles. This territory is traversed by the Walpasixa, Prinzapulka, Kukallaya, Wawa, Sisín, Awastara, and Wanks Rivers and incloses the lagoons of Pahara, Twappi, and Beymona.

All the above-named rivers are navigable, but bars across their mouths prevent large vessels from entering, and navigation at present is carried on by gasoline boats, canoes, and "pitpans." The latter are large, built-up canoes capable of holding several tons of freight each.

The land for a few miles on each side of the rivers mentioned is a dense jungle, where malogany cutting is now carried on, log rafts being easily floated downstream. Inside from these jungles and around the lagoons the pine lands extend, and to obtain the best results railroads must be built to carry out the logs or sawed lumber.

Sawmills in Operation and Openings for More.

A few years ago a sawmill was in operation on the Wawa River, but it failed and was allowed to go to ruin. Another at Rio Grande was sold some years ago, but has never resumed operation owing to lack of capital for cutting and bringing out logs. The mill at the Rio Grande Bar is sawing up lumber for 50 per cent of the logs brought down. One at Pearl Lagoon is showing satisfactory results, but is not cutting pine (that place being out of the pine belt)—only cabinet and hardwoods. At Cape Gracias a Dios another mill is sawing pine and has been in operation for some years.

Owing to the high prices of lumber, dressed or undressed, there is no reason why a good company should not succeed in operating several mills, in combination with shingle mills and a sash and door factory, on this coast. The best locations are on the Wawa River and the Pahara Lagoon. On the Wawa the old mill site could be used, and on the Pahara Lagoon logs can be brought from all parts of the surrounding country. Dakura, Pahara, Awastara, Krukira, Twappi, etc., can all be reached by water from there. If this lagoon were connected with the Wawa River by railroad, the line would pass through some excellent timber. The climate is very healthful.

At present two or more companies are distilling turpentine in Honduras with satisfactory results. Nicaragua offers equal facilities for this industry, as the pine contains a large percentage of resins and oils.

Land for Lease or Purchase—Grazing and Coconut Planting.

There are several pine properties for sale on this coast, but as the land is very poor for agricultural purposes, being a sand and gravel composition, it is recommended that prospective mill operators lease the timber rights from the Government, as such a lease can be had at moderate cost, either so much per log or per hectare (2.47 acres) of land. If any operator would prefer to buy the land outright from the Government, he can do so at 4.50 soles (about \$1.90 gold) per hectare, and to this must be added the expenses for titles and surveying.

The only use to which this land can be put is for grazing or for planting coconuts. Cattle do quite well and are not molested by tigers in the open country, but it requires at least two acres to support each animal. Coconuts bring a good price and are an excellent investment.

It takes, however, five to six years after planting before they come into bearing, but each tree will then bear about 200 nuts yearly. The trees are usually planted 30 feet apart, and when young must be protected from cattle, which will eat the tender leaves.

NOTES FROM ASIATIC RUSSIA.

[By Consul John F. Jewell, Vladivostok.]

New Wireless Stations—Trans-Siberian Schedule Reduced.

It has been proposed that the Duma shall provide \$515,000 for building radiotelegraph stations along the Kara and White Seas to insure telegraphic communication between northern and western Siberia with western Europe via the Arctic Ocean.

During the coming summer the time of the express trains on the Trans-Siberian road will be considerably shortened. The time of the express trains from Moscow to Vladivostok will be 8 days 17 hours 35 minutes, and from Vladivostok to Moscow 8 days 11 hours 35 minutes; from St. Petersburg to Vladivostok, 9 days 2 hours, and from Vladivostok to St. Petersburg, 9 days 4 hours 40 minutes. The time of the ordinary passenger trains from Moscow to Vladivostok will be 12½ days and from Vladivostok to Moscow 11½ days. It is thought that by next year a further reduction in the running time of 24 hours will be made. The Minister of Ways and Communications hopes before many years to provide a 6-day train from Vladivostok to St. Petersburg.

Navigation of Amur—Oil Exploitation.

The Chief of the Waterway Control has informed Amur shipowners that foreign ocean-going steamers will be permitted to go up the river as far as Mago, 40 miles above Nikolaiefsk. This regulation is likely to have an influence concerning the loading of beans and other bulk cargo, as at Mago loading can be done much cheaper and more quickly than at Nikolaiefsk.

A general meeting took place in Vladivostok recently of the participants in the Sakhalin Oil Co., who have signed an agreement with a representative of a group of French capitalists who have subscribed \$1,030,000 capital for exploiting the Sakhalin oil fields. It is reported that toward the end of May an expedition will be sent to Sakhalin to examine the fields, for which \$100,000 has been put aside.

Investigations and Studies.

According to an imperial order, the following sums were put at the disposal of N. L. Gondatti as president of the Amur Expedition:

For the study of districts adjoining Mongolia and Manchuria, \$10,300; for soil and botanical study in the Yakutsk-Vilinsk district, \$13,000; Yakutsk-Ust Maya, \$12,360; Yakutsk-Nelkon-Ayan, \$5,330; sources of the Angara River, \$10,660; sources of the Vitim River, \$7,800; Troitskosavsk County, \$18,575; and for agronomical and meteorological work in the Amur Province, \$40,170, and for the Maritime Province, \$6,865.

A Norwegian expedition headed by Erian Ulsen, a scholar of Christiania University, intends starting soon to study the flora and fauna and the natives inhabiting northern and middle Asia. The route to be followed is from Omsk, Siberia, by the River Irtysh to Semipalatinsk, and from the mouth of the Irtysh back to the Mongolian frontier. In 1913 this expedition intends to visit Krasnoyarsk, Irkutsk, go north along the banks of the Yenisee River to Cape Tolstoi, and return to Norway via the Arctic Ocean.

NEW ELECTROPLATING PROCESS.

[From Consul Horace Lee Washington, Liverpool, England.]

Following an inquiry from the United States as to a new method by which any firm material may be plated with copper, interviews were had with the leading copper merchants, smelters, and manufacturers in the Liverpool district, but in no case had any of them heard of such a process. A copper plater, however, stated that he thought it possible the American inquirer might have reference to a process recently described in Chambers Journal, and from this article the following extracts have been taken:

An ingenious invention which is illimitable in its applications has been perfected by two Italian chemists. Briefly described, it comprises a means of depositing metals of any character upon any insoluble surface by electrical energy. The results so far achieved promise to revolutionize the whole art of electroplating and decoration as well as many other branches of industry. China, wood, glass, celluloid, paper, and other substances which have hitherto been regarded as beyond the electroplater's craft are coated as easily as the metals generally associated with this process. What is more, the plating is everlasting. It enters into the fabric treated so that it becomes an integral part of the article. Thus, for instance, if an attempt is made to chip the plating from a glass vase the glass will come away with its metal coating.

Method Has Extended the Plater's Art.

There is a wedgwood tea service on exhibition which shines with the true luster of polished silver. The outer surface is so well covered with this metallic armor that the whole resembles a silver set. It is only when the interior is examined and the pottery beneath is observed that one realizes that the silver had been deposited upon the external surface. What is more, the outer sheathing is not a thin film but a solid sheet of metal which can be made of any thickness and capable of being worked by the engraver. The authorities have expressed their willingness to apply the hall mark to articles so mounted. The process is likely to supersede the present process of silver mounting cut glass and other articles. Instead of the metallic adornment being attached by means of plaster of Paris, which is simply a makeshift, the metal deposited upon the glass becomes part and parcel of the article.

The process has extended the electroplater's art to a considerable degree. Any metal and its alloys can be electrically deposited upon some other metal as a base. Zinc, tin, and lead can be deposited as easily as silver or nickel. This fact is of vital interest to a host of industries, as is borne out by the action of one of the largest builders of naval vessels, who has adopted the process for the zinc and tin plating or galvanizing of the steel parts of the boats. The deposit is not so thin, as in ordinary galvanizing, that a pin scratch will penetrate the protective skin, but is a solid sheathing of metal associated with the other metal beneath.

The possibility of being able to plate wooden articles seems so remote as to be fantastic, yet it is as efficiently accomplished by the Marino process as if copper were being plated. So far as china plating is concerned the article must be in the unglazed or biscuit condition, and is first coated with a chemical agent. In the same manner glass which is to be treated must first be roughened by sand-blasting to remove the polish and to enable the metal to secure a grip. Another point is that the deposit, no matter what the character of the base, may subsequently be oxidized, lacquered, etc., in just the same way as ordinary electrowork.

Its Interest to the Housewife.

To the housewife the process is of far-reaching value. It will strengthen the articles in common use and make them more hygienic, as they can be scoured and cleaned to greater advantage. She will be able to use aluminum more extensively than heretofore. By the Marino process the interior of an aluminum saucepan or coffee-pot can be given a coating of tin which permits the use of soda and acid cleansing mediums with impunity, whereas such methods upon the pure aluminum bring about its early destruction. The possibility of being able to deposit a protective coating upon aluminum, and thus save it from oxidation, will popularize the use of this metal in industries where, although it is urgently required by reason of its lightness, it is viewed with disfavor owing to its rapid corroding.

NEW GOVERNMENT PUBLICATIONS.

[Announcement of Superintendent of Documents, Government Printing Office, Washington, D. C.]

Scenic Wonders.

The Department of the Interior has begun the publication of a series of profusely illustrated pamphlets descriptive of the great national parks in the West and the natural wonders which they inclose. Three numbers have been thus far issued, namely: (1) Geological History of the Yellowstone National Park; (2) Geological History of Crater Lake, Crater Lake National Park; (3) Geysers.

These are not technical treatises. While they give much scientific information, it is not given in technical terms. The purpose of the publications is to popularize the parks, of which there are now 14. The Superintendent of Documents has these interesting and ornamental pamphlets for sale at 10 cents each.

Government Standard for Cement.

Circular 33, Bureau of Standards, Commerce and Labor Department, issued May 1, 1912, has for title "United States Government Specification for Portland Cement."

This specification is the result of a Government inquiry by a board on which all Government departments were represented. This board conferred with representative unofficial consumers and manufacturers and with special committees of engineer societies. The specification given in Circular 33 was unanimously adopted by all departments of the Government at a departmental conference February 13, 1912, and by an Executive order issued April 30, 1912, it was directed that all cement used in Government work shall conform to this specification. Circular 33 is sold by the Superintendent of Documents at 10 cents a copy.

A New Legal Work, Beginning a Series.

Edwin M. Borchardt, law librarian of the Library of Congress, is the author of a work entitled "Guide to the Law and Legal Literature of Germany," which has been published by the Library and is sold by the Superintendent of Documents, Government Printing Office, Washington, D. C., at 65 cents in cloth binding. It is hoped and intended to issue hereafter similar treatises on the laws of European countries.

The commercial and social relations of citizens of the United States with the principal European countries, already extensive, are so sure to be much more extended in the near future that a knowledge of the general principles of their systems of law, such as Mr. Borchardt's manual gives for Germany, would seem to be a desideratum for many American interests, both individual and corporate.

Federal Antitrust Decisions.

In 1907 the Department of Justice published in two volumes Federal Antitrust Decisions, 1890-1906. This year these two volumes have been reprinted, with two more, giving the trust cases to the present date, with tables of cases reported and cases cited and an index-digest to the whole, making a set of four volumes, bound in buckram, and sold by the Superintendent of Documents at \$4 for the set.

Everglades of Florida.

A very complete collection of all the acts, reports, and other papers, State and National, relating to the Everglades and their reclamation, has been published by the Government as Senate Document 89, Sixty-second Congress, first session. Besides 208 pages of text, the document carries two large folded maps and several plates and diagrams. Copies are for sale by the Superintendent of Documents, Washington, D. C., at 20 cents.

Interesting to Coin Collectors.

The Bureau of the Mint has lately published an illustrated volume (634 pages text and 16 pages plates) entitled "Catalogue of Coins, Tokens, and Medals in the Numismatic Collection of the Mint of the United States at Philadelphia, Pa."

The importance of the mint's coin collection, known hitherto but to few, is now made clear to the many, and it is certainly a remarkable collection. While it is especially strong, if not absolutely complete, in the field of American coins, tokens, and medals, it holds also many coins of the ancients, and early coins of other American and European countries. Its descriptions are full and exact and the general make-up and outlook of the book pleasing. The Superintendent of Documents, Government Printing office, Washington, D. C., sells the catalogue for \$1.

THE CASSAVA INDUSTRY IN JAMAICA.

[From Consul Julius D. Dreher, Port Antonio.]

Although an effort three years ago by Americans to build up a cassava industry in Jamaica proved unsuccessful, it is announced that another attempt is about to be made to grow cassava on a large scale.

The American promoters [address obtainable from the Bureau of Manufactures] have acquired a large tract of land in the parish of Trelawny on which coconut trees will be set out at regular intervals on the same ground with the cassava plants. As the work progresses it is proposed to build a factory for manufacturing the cassava tubers into various products, but chiefly starch, for exportation to the United States. Of the exports of cassava starch from Jamaica in 1910, amounting to \$7,947, the United Kingdom took \$6,363 and the United States only \$817; and of \$660 worth of cassava wafers exported, the United States took \$519, or 80 per cent.

Cassava, which is also known as "manioc," a corruption of the name of the genus "*Manihot*," is cultivated extensively in the West Indies, in South America, and in Africa, where it forms a staple article of diet. In Jamaica cassava ranks third among the "ground provisions" which are the principal articles of food among the natives, yams coming first and potatoes second. Both kinds of cassava are grown in Jamaica, the sweet cassava (*Manihot aipi*) and the bitter cassava (*Manihot utilitissima*), both being prolific bearers of farinaceous tubers usually 8 to 10 inches in length and 1 to 3 inches in diameter. The tubers of the sweet cassava are eaten as a vegetable like yams and potatoes. The bitter cassava contains an acrid, poisonous, milky juice, which has to be removed by pressure after the tubers have been washed, scraped, and grated. Bitter cassava is extensively used to make starch for local use and in making "bammies," a sort of cake much used as a substitute for bread in the southern and western parts of the island. There is a cassava factory in the parish of Clarendon which manufactures a variety of products, such as starch, flour, tapioca, breakfast foods, cakes, wafers, cassareep, sauces, etc. Cassava wafers are rightly regarded as a great delicacy, especially by tourists to Jamaica.

The imports of cassava and tapioca into the United States during the fiscal year 1911 aggregated 60,915,112 pounds, having an average unit invoice value of 2.3 cents per pound. [They enter free of duty—B. of M.]

Jersey Island Potatoes in England.

Vice Consul James Fisher reports the opening of the new potato season at Hull, England, about three weeks earlier than usual. The first direct potato cargo steamer arrived from St. Malo on May 13 with over 7,000 packages, some 2,000 being retained by Hull dealers, the balance going inland. Good Jersey potatoes are retailing in Hull at 4 to 5 cents per pound.

The Siamese Ministry of Finance has been sending three students to Europe annually to take a five-year course in finance, but the Minister has decided to increase the number to eight and to prolong the course to eight years.

VIOLIN MAKING IN GERMANY.

[From Consular Agent W. Bruce Wallace, Markneukirchen, supplementing articles in Daily Consular and Trade Reports for May 7, 1910, and Jan. 7, 1911.]

Violin boxes, until a few years ago, were made here entirely by hand and their manufacture, with but few exceptions, was a house industry. Since 1907 it has been possible to manufacture the body by machinery. A stock company of several of the large exporters having been formed, it bought the patents and erected a large factory. The original purpose of this concern was to furnish the dealers with a violin body, here called "schachtel," or box, that would be as cheap as those made in Bohemia and with the advantage of being made of seasoned wood and each body being exactly the same. Now, however, through improvement in machinery, they are also able to manufacture the violin finished for the market.

It is stated that attempts have been made to import the violin bodies into the United States for finishing. Because of the cheapness of the house-industry violin, however, the Markneukirchen dealer was able to undersell in the United States notwithstanding the 45 per cent duty.

A large amount of sheep gut is imported into this district, for manufacturing strings, from almost all sheep-growing countries, except the United States.

TRADE PROSPECTS IN SOUTH AFRICA.

[From Consul E. A. Wakefield, Port Elizabeth, Cape Province.]

From present indications the volume of trade for this consular district for 1912 will show a decided increase both in imports and exports over the preceding year. Exports valued at \$508,724 (126 invoices) were sent from Port Elizabeth to the United States during the quarter ended March 31, as against \$464,300 (91 invoices) during the same period in 1911 and \$359,700 (66 invoices) in 1910.

Imports for the first two months of 1912 totaled \$7,450,250 and in 1911 \$6,609,879, or an increase of \$840,000. The combined imports for this consular district (Port Elizabeth and East London) for January and February, 1912, were \$11,158,873, an increase of \$1,681,000 over the same period last year. These figures are significant as indicating the increasing commercial importance of this district. No other South African port shows such an increase.

While English manufactures have by far the greater portion of this trade, American manufactures are being imported in quantities which compare very favorably with the increased bulk of trade.

RETAIL TRADE DELIVERIES BY MOTOR.

[From the London Times.]

At the annual meeting of the Civil Service Cooperative Society, held at the Stores, Haymarket, London, on May 13, President J. T. Helby stated that their country business was largely increasing, and the society now delivered within a circuit of 50 miles of London. It used to be a practice for their customers to go to the stores to make their purchases, and in many cases took them away in their own carriages, but they were now leaving London in large numbers, and expected their goods to be delivered at the same prices and with the same dispatch as if they still resided in town. Nevertheless, the town delivery, as far as the number of parcels was concerned, showed no decrease, but the parcels were smaller and of less value. During the past year the society delivered 571,781 parcels.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8908. Revolvers of cheap quality.**—An American consular officer reports that a firm in his district desires to be placed in communication with an American manufacturer of revolvers of a cheap quality. There is a large demand in the country in question for cheap revolvers, which are at present supplied by European manufacturers. Satisfactory references will be furnished. Correspondence in English, French, or Italian.
- No. 8909. Refined sulphur.**—A business man in a European country informs an American consular officer that he has important buyers of refined sulphur for industrial purposes, for reexport to divers markets abroad. A description of sulphur produced in the United States, which appeared in a recent issue of a local newspaper, was brought to his attention and he is desirous of being placed in connection with sellers of this product. It is his intention to do business as an agent against a fixed commission previously arranged, the buyers of the sulphur being first class in every respect.
- No. 8910. Textile machinery and textile goods.**—A report from an American consulate states that a commission agent in a part of a European country where the manufacture of textile goods is flourishing would like to hear from manufacturers of textile machinery and supplies who desire a representative for the district. He would also consider an agency for any textile goods that have a prospect of success.
- No. 8911. Library furnishings.**—An American consul has forwarded a report on library furnishings which will be required to carry out a plan for the collection of certain historical and other documents relating to a certain foreign country. The undertaking will include the preparation of the building, equipment with shelves, furnishings such as chairs, tables, desks, writing materials, stationery, etc. Copy of the complete report and plans which accompanied it can be obtained from the Bureau of Manufactures.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 664. Dredging.**—Sealed proposals for dredging Rouge River, Mich., will be received at the United States Engineer Office, 337 Federal Building, Detroit, Mich., until June 28, 1912. Information on application to C. McD. Townsend, Colonel, Engineers.
- No. 665. Subsistence stores, etc.**—Sealed proposals will be received by the medical officer in command, United States Marine Hospital, Pittsburgh, Pa., until June 4, 1912, for furnishing subsistence stores, etc., required at the hospital during the fiscal year ending June 30, 1913, in accordance with a list of articles and specifications, copy of which may be had on application to the officer named.
- No. 666. Brick storehouse.**—Sealed proposals will be received at the United States Engineer Office, 920 Seventeenth Street, N.W., Washington, D. C., until June 12, 1912, for furnishing materials and erecting complete, a brick storehouse on Potomac Park. Information on application to W. C. Langfitt, Lieutenant Colonel, Engineers.
- No. 667. Dummy armament and fire-control stations.**—Sealed proposals for the installation of dummy armament, fire-control stations and accessories in the projected armory of the Eighth Coast Artillery district, New York City, will be received at the United States Engineer Office, Room 707, Army Building, New York, N. Y., until June 4, 1912. Information on application to S. W. Roessler, Colonel, Engineers.
- No. 668. Cable.**—Sealed proposals, in duplicate, will be received at the office of the Chief Signal Officer, War Department, Washington, D. C., until June 10 for furnishing the Signal Corps with various quantities and types of cable required. Specifications and particulars can be obtained from the office named. (Proposal No. 590.)

DAILY CONSULAR AND TRADE REPORTS

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ENGLISH WOOLEN AND WORSTED INDUSTRIES.

[By Consul Augustus E. Ingram, Bradford.]

While conditions in the woolen and worsted industries of the West Riding district of England were better last year than for 1909, there was a decline in the trade compared with 1910. There were marked difficulties throughout the year, due to industrial disturbances at home, unsettled political conditions in a number of foreign countries, tariff legislation in Japan, the uncertainty as to tariff revision in the United States, and the high price of wool.

This decline in the woolen and worsted trade, however, was not seriously felt owing to the diversity in the business of the district. Indeed, the leading business men stated that the past two and one-half years have been probably the most prosperous in the history of the district. As a Yorkshire publication remarked, in part:

The interdependence of interests is not so close that when one branch suffers the rest suffer with it. In fact, interests in some cases are diametrically opposed, so that what is lost by one section is gained by another. While the dress-goods manufacturers enjoyed less than a fair share of fortune's favor last year, due to the unusually hot summer, the same cause operated in favor of the cotton-goods trade, and Bradford cottons had a record year.

The building trade, which is said to be the most sensitive industry, the first to feel depression, and the last to recover, seems to have enjoyed a good year. A fair number of new dwellings were erected in the district, while there was considerable activity in the erection and enlargement of mills and factories.

Exports to the United States.

The declared value of the merchandise invoiced at the Bradford consulate for shipment to the United States during 1911 showed a decrease of \$3,720,330 compared with 1910 (accounted for chiefly in the items of raw wool, stuff dress goods and linings, and textile machinery). Of the total shipments of wool to the United States from the Bradford district last year, amounting to 10,454,757 pounds, valued at \$2,443,012, British wool represented 3,852,305 pounds, valued at \$945,867, and colonial and foreign wool 6,602,452 pounds, valued at \$1,497,146.

The articles and their value for 1910 and 1911 are given in the following table:

Articles.	1910	1911	Articles.	1910	1911
Alpaca hair.....	\$63,798	\$47,379	Rice flour.....	\$6,525	\$1,721
Automobile accessories.....	2,407	308	Rubber manufactures.....	2,760	3,226
Camel's hair, tops and noils.....	419	1,345	Sheepskins, pickled.....	447,555	525,394
Card clothing.....	64,286	62,682	Silk goods:		
Carpets and rugs.....	48,931	79,517	Silk and silk and cotton piece goods.....	1,984	4,846
Chemicals.....	2,379	2,096	Silk seals, plushes, etc.....	13,631	9,235
Cotton cloths:			Silk noils and waste.....	89,183	192,549
Dress goods.....	605,629	619,628	Spindle bands.....	10,511	10,565
Linings.....	1,407,227	1,547,289	Stuffs:		
Cotton waste.....	8,644	5,952	Dress goods.....	2,084,476	1,247,308
Craped wool, hair, etc.....	63,538	35,998	Linings.....	1,661,870	933,872
Groase, etc.....	25,515	20,329	Tape, braid, etc.....	7,677	3,847
Hair cloths.....	797	7,989	Tapestry, damasks, etc.....	11,343	13,565
Hemp bagging, etc.....	3,406	3,438	Wire (iron, steel, etc.).....	482,813	362,971
Household effects.....	5,966	3,674	Wool:		
Jute waste.....	16,737	63,331	British.....	2,126,633	945,867
Leather, and manufactures of:			Colonial, etc.....	2,007,724	1,497,145
Butts, bends, etc.....	157,959	189,119	Wool waste.....	6,006	3,582
Belting, manufactured.....	5,469	9,912	Woolen cloths.....	100,469	18,624
Linens.....	1,617	515	Worsted coatings.....	728,106	435,089
Machinery.....	1,206,261	515,639	Yarns:		
Mohair (goat's hair).....	140,220	70,166	Silk.....	962,345	1,234,274
Noils.....	16,203	95,439	Cotton.....	284,148	418,863
Paper.....	31,439	14,226	Worsted and mohair.....	10,319	15,346
Plants.....	2,318	376	Other.....	6,653	136
Rags (new woolen clippings).....	75,620	12,450	All other articles.....	7,697	9,367
			Total.....	15,016,483	11,296,153

The exports to the Philippine Islands were valued at \$14,326, against \$18,007 for 1910, and consisted principally of cotton linings and noils. Stuff dress goods amounting to \$316 worth were the only exports to Porto Rico, and there were no shipments to Hawaii.

Prices and Wool Supplies.

First and foremost of all industries in Bradford is wool. It is stated that four-fifths of the wool manufacturing of Great Britain is carried on in the West Riding of Yorkshire. There were but slight fluctuations in the price of the raw material. One report gave the price of merino wool at the close of the year as only 5 per cent lower, and crossbred 5 to 7½ per cent lower than for the same period 12 months previous. This was remarkable in view of the fact that the imports from Australasia, South Africa, and South America were some 150,000 bales in excess of 1910, and that the market had practically had no support from the United States, and at times the Continent showed weakness. It indicates conclusively that the consumption of wool is steadily on the increase, a fact that the American woolgrowers should bear in mind. The latest available statistics estimate that the world's sheep stocks have only increased from 522,584,083 in 1895 to 582,722,789, or 11 per cent, while the world's wool-using population increased in the same period from 520,336,225 to 635,457,578, or 22 per cent.

At the London wool sales in January, 1911, though there had previously been a strong "bear" movement made at Roubaix and Antwerp, prices were maintained. Prices at the March sales were aided by the heavy consumption needed to complete Japanese orders before the imposition of the new import duties on textiles in that country. In September prices began to decline, but at the London

November and December sales there was a reaction and prices hardened, in part due to the purchases for the United States.

In regard to merinos, one report stated that a feature of the demand for these wools during the year was—

the keenness with which really fine-haired parcels were sought after. Year by year the supply of these grades is becoming more limited, so many of the Australian growers having turned their attention to the production of a larger and heavier fleece of a rougher quality than formerly. This change has given the South African farmers their opportunity, of which many of them have quickly availed themselves, and of recent years by careful selection and breeding they have effected a vast improvement in the quality of the wool.

The more progressive growers are also paying more attention to the classing and skirting of their fleeces. Crossbreds, and especially those light shrinking wools most favored by the United States, suffered most owing to the absence of American purchasers.

Mohair Industry—Trade in Wool Tops and Noils.

In spite of the fine weather during the summer of last year, conditions in the mohair industry were unsatisfactory. It is stated that the competition of other bright materials made of luster wools, and particularly mercerized cotton, has had a serious effect on the sale of mohair goods. The exports of mohair (goat's hair) to the United States last year decreased to nearly half the quantity for 1910.

Wool combing or top making, and the trade in this prepared wool, are among the most important industries of the district. The export trade of tops has greatly developed in recent years, the shipments from the United Kingdom in 1900 being 28,031,200 pounds; 1905, 35,386,300 pounds; and 1910, 42,129,400 pounds. The exports last year, however, decreased to 38,145,400 pounds. Germany takes the largest share of these tops, followed by Japan, Sweden, Italy, Belgium, and other continental countries. There are no shipments to the United States. The bounty granted by the Australian Government to the top-making industry of that country is having its effect on the Bradford industry, as the Australian shipments to Japan are increasing.

The total exports of noils from the United Kingdom last year were 17,073,000 pounds, a slight decrease compared with 1910. In wool waste the exports reached the record total of 12,592,500 pounds. The shipments of noils from the district to the United States in 1911 showed a marked increase over the previous year, cashmere noils and cardings forming a large part of the exports.

Shipments of Woolen and Worsted Yarns.

The output of woolen and worsted yarn last year is said to have been one of the best. Spinners of botany yarns were busy throughout the year and the consumption of hosiery yarns was phenomenal, owing to the popularity of knitted coats, jerseys, etc. Mohair yarns suffered, the prevailing fashions not being favorable to their consumption, and moreover artificial silk is proving a serious competitor.

The total exports of worsted yarns from the United Kingdom were 59,621,900 pounds, of which Germany took 35,642,400 pounds. Woolen yarns reached a total shipment of 5,751,700 pounds, while in mohair and alpaca yarn, out of a total export of 15,992,100 pounds, there were sent to Germany 11,669,800 pounds. The exports of wool or hair yarn not enumerated also amounted to 9,638,700 pounds,

making an aggregate total of 91,004,400 pounds of yarn exported from the country. The exports of worsted and mohair yarns to the United States from this district, amounting to \$15,346, consisted mostly of fancy yarns.

Cotton Spinning.

Cotton yarns are largely consumed in this district, being used not only for Venetians, poplins, waterproofing cloths, mercerized fabrics, and voiles composed of cotton and artificial silk, but also for warps in cotton coatings, linings, and other wool cloths. The cotton-spinning and doubling industry in Yorkshire is overshadowed by its proximity to Lancashire and by the importance of the worsted industry of the West Riding. The number of cotton spindles in Yorkshire is in excess of 2,500,000, as compared with 3,500,000 of worsted spindles, and approximately 1,500,000 of the carded woolen trade. The preponderance of these Yorkshire cotton spindles are, however, "doublers" or consumers of single yarn from Lancashire. It is said that the spinning range includes both American and Egyptian cotton and extends to 120s counts. The export of cotton yarns from this district to the United States last year amounted to \$418,863, the largest total recorded. These yarns were mostly mercerized and of fine counts.

Shipments of Silk Noils and Waste.

The outstanding feature of the year in the silk-spinning trade, which is so largely carried on in Bradford and the neighboring town of Brighouse, was the high range of values. The United States was the largest customer. The exports to all countries of silk noils and waste from the district last year were valued at \$1,234,274 against \$962,345 for 1910. Those to the United States were \$192,549 and \$89,183 for the two years, respectively. The increase in the shipments of silk noils and waste to the United States last year was due to the decision of the customs authorities that silk noils from cocoons or from waste silk should be classified as silk partly manufactured and be dutiable on entrance to the United States at 35 cents per pound instead of as silk waste free of duty. It is stated that American manufacturers had been importing these noils in order to produce a woolen cloth with a raised face, soft handle, and silken luster, suitable for overcoatings. The difficulty at the customhouse is said to have arisen from some firms importing "noils" of such a length as to resemble drafts suitable for spinning, and consequently a limit of length, 2 inches, has been placed on silk noils to be free of duty. Shippers claim that this length is prohibitory, and shipments have now practically ceased.

The "Hobble" Skirt and the Dress Goods Trade.

The greatest adverse influence in the dress-goods trade during last year was the "hobble" skirt fashion. Not only did it greatly reduce the demand for dress material, but it also cut off a large portion of the underskirt, petticoat, and lining trade. The small quantity of material in these narrow skirts also allows a heavy fabric to be worn without the weight becoming unduly burdensome. The long knitted coats so much worn recently by women have also injuriously affected the dress-goods trade, though benefiting the soft knitting-yarn trade.

While stuff goods are the principal production in Bradford, great developments have been made in the manufacture of high-class cotton goods, notably heavy cotton poplins, gaberdines, etc., and of fancy cotton and artificial-silk fabrics.

Decreased Exports of Worsted Coatings to United States—Cheviots.

The worsted coating trade enjoyed a good year, but owing to high prices of raw material and increased manufacturing expenses it is said that profits were small. Corkscrews, used for morning coats, have apparently gone out of fashion, the popular cloths now being the plain and fancy twills. The passing of the frock coat and the black morning coat, which is so marked especially in England, has also seriously affected the sale of trouserings. The exports of worsted coatings to the United States during 1911 decreased \$293,017 in value compared with 1910, but the shipments of late years are insignificant compared with the years 1895, 1892, and 1889, when the shipments to the United States amounted, respectively, to \$8,561,228, \$5,302,701, and \$6,564,304.

A feature of the year was the use for women's cloaks or mantles of thick cheviots, double faced, with contrasting and often brilliant color effects. These reversible cloths were originally made in Batley and the Colne Valley, but they are now being tried in worsteds. They are said to be favored by the makers, as no linings are necessary. Being practically a double cloth, they are proportionately dearer.

Trade in Cloth Caps, Cloths for Cravenetting, etc.

It is said that the manufacture of cloth caps, which are now so extensively worn in the United Kingdom, consumes a large amount of material consisting mostly of woollen tweeds. Some local manufacturers now specialize in producing cloths for this purpose. These caps are made larger than formerly, and instead of retailing at 13 to 42 cents each the price is now 36 to 60 cents each.

The output of warp-faced cloths for cravenetting—the so-called gaberdines—is said to have been large, as these are used for men's and women's raincoats, which have become so popular. The overcoating trade suffered by the competition of these cravenette cloths. The increased use of automobiles has been responsible for a large increase in fabrics known as proofings, and also in cotton linings used in the manufacture of rubberized cloths for the hoods of vehicles.

The bright goods manufacturers did not have a good year. "Permos" (made from the best wool and mohair) were rather neglected, and the American trade in Sicilians was small. Heavy-weight mohairs, such as are used for summer coats, waiters' jackets, etc., are always a staple article, and the same kind of material is now also being used for dust cloaks and rugs for motorists.

Use of Artificial Silk—Popularizing British Fabrics.

There was a good trade in cotton and artificial silk fancies, tasteful designs in striped voiles and all-over effects being produced. Nothing has been more striking than the progress made in the use of artificial silk, and now that the difficulties in producing even yarn and in finishing the woven fabric have been gradually overcome, artificial silk is a most important feature in the manufactures of this district. Large

quantities of these cotton-warp and artificial-silk west fabrics are made not only in Bradford, but also in Bingley, Keighley, etc. They are chiefly made for the export trade. Many of these light fabrics are not piece dyed but merely finished. An artificial-silk plant is being established in Bradford, and possibly before long the demand for these yarns may be supplied locally.

Silk goods also form an important branch of the Bradford trade. The silk goods woven in Lancashire, like the cotton fabrics, are sent to Bradford to be dyed and finished. Of the 22 firms in England engaged in silk spinning, 14 are in Yorkshire, mostly at Brighouse. There are at least 13 firms in Bradford using silk, 1 firm alone employing over 5,000 people, where not only silk spinning but also the manufacture of silks, velvets, silk plushes, etc., are carried on.

The Ladies' All-British Fabric and Fashion Association is reported to have been active in endeavoring to popularize all-British fabrics. As a result of its efforts in theatrical circles, many thousands of dresses have been made from all-British fabrics.

The Lining Trade.

Lining manufacturers had a good year, and their turnover was large. It is stated that owing to the demand for tailor-made costumes for ladies and the light colors prevailing in men's clothes, there was a big trade in colored linings, including both italians and mohairs, the latter chiefly for export. In cotton linings manufactured, or at least finished, in Bradford there was a distinct increase in the home and continental trade, mainly in the higher-grade finishes.

The mercerized cotton linings have in many cases been adopted in place of union linings and the more expensive silk. Such a perfection has been reached in the finish of these cloths, such as the satin and italian cottons with the marquise, schreiner, or other finish, that the silk effect can be purchased for the price of cotton linings. The shipment of stuff linings to the United States fell off considerably last year, but in cotton linings there was a slight increase.

Establishment of Dyeing Branch in United States—Carpet Trade.

One of the dyeing firms of Bradford has established a branch in the United States (Bradford, R. I.), and it remains to be seen if, in order to save duty, goods in the gray will be exported from this district to be dyed and finished in the United States.

It is stated that the output of carpets and rugs in the United Kingdom last year exceeded that of any previous year, although the increased use of linoleum is an important adverse factor. There was a growing demand for the better qualities of carpets. Although prices were slightly advanced early in the year, owing to the increased cost of raw materials, profits are said to have been small. This is due to the keen competition of the many British manufacturers and the foreign imports. An English publication stated that "a fabric is being perfected which when placed on the market must prove a serious rival to some of the oriental carpets which so long have been in favor."

The Iron, Machinery, and Tool Industries.

The firms engaged in the iron, machinery, and tool manufacture had a good year, several factories working overtime. At Keighley the worsted-spinning machinery trade experienced a steady demand, although there was a considerable falling off in the shipments to the United States.

At Otley, where printing machinery is manufactured, business was brisk and the export trade is being greatly developed. This machinery is not only shipped to the British colonies and to most of the European countries, but also to South America and to China and Japan. The shipments of printing machinery to the United States last year were valued at \$6,788. According to a press report, a device has been inserted on the printing press manufactured at Otley whereby the sheets are removed from the press without the aid of flyers and without anything touching the printed surface, thus obviating all chance of smearing.

Increased Sales of American Goods—Automobiles.

The sale of American goods continues to increase, and the introduction of new lines from time to time indicates that the British public are always ready to purchase foreign products which appeal to them. Statistics showing the imports from the United States into this district can not be obtained. A large percentage of American goods sold here are obtained from branch houses or agencies established in one of the principal cities, where stocks are carried ready for immediate distribution.

There was an increase in the sales of American automobiles last year compared with the previous year. In certain makes the demand was greater than the supply. Since the Government has raised the tax on motor cars according to horsepower, the demand for the higher-priced car has declined, while the medium and lower-power cars of 15 to 25 horsepower are in demand.

During the past year a new motor vehicle, called cycle car, has been developed. It is in reality a light four-wheeled runabout seating two passengers and with engines up to 8 horsepower. There are several makers experimenting with belt, chain, and shaft drives in endeavoring to place on the market a popular vehicle which can be produced to sell under \$480. The greatest drawback appears to be the high cost of a differential in the back axle, and various attempts have been made to do without it.

Demand for Dental Appliances, Hardware, Electrical Appliances, etc.

American dental appliances are used to some extent by most of the leading practitioners in the Bradford district. The education committee of the city recently established a clinical department, and all school children have their teeth examined periodically. In artificial teeth both the American and English make are used in combination, the incisors of the former being preferred, owing to their more natural appearance.

The demand for American hardware was normal. American engineers' and woodworking tools are recognized as the best on the market. When times are good and workmen have the money they invariably purchase high-class tools, realizing that they give better results.

American vacuum cleaners are selling well in this district. Among other American products favorably received are brass valves, unions, engine packing, carborundum, and lawn mowers.

Business in electrical accessories was good during 1911, but American wares have not made much headway in this market. The standard requirements are said to be more stringent in Bradford than in any other city in the country, and American goods have been

at a disadvantage. To overcome this disadvantage lamps should be made with bayonet connections in place of the screw, and switches in tumbler instead of the thumb styles.

American Organ Installed—Canned Goods.

A large electric organ, valued at over \$10,000, was purchased from an American firm and erected for exhibition purposes in the establishment of a leading musical firm. Great interest was manifested in the instrument, and in a short time it was disposed of to a local purchaser, and there is every probability of further sales.

American canned fruits, especially apricots, peaches, pears, and pineapples, have been selling well on this market; also certain canned vegetables, such as tomatoes and asparagus. Prices in American hog products have been so high that the demands for the Russian and Danish products were stimulated. There were increased receipts of canned meats from South America and Australia, owing to the high prices of the American product.

Decreased Trade in Leather Shoes but Increased Purchases of Overshoes.

The demand for American shoes on this market has declined considerably. A large number of British firms manufacturing on a large scale have retail establishments in the principal cities and towns of the country. Shoes are retailed in this district at as low as 95 cents per pair, though only suitable for dry weather. A serviceable pair can be obtained at \$1.70, but the popular price is \$2.55, and there are stores which confine themselves exclusively to this figure.

A good trade continues to be done in American overshoes, which sell at 46 cents to \$1.20 per pair, the principal demand being for those selling at 85 to 90 cents per pair. This demand is said to be owing to the neater appearance of the American shoe as compared with other makes and to the manner in which it holds its shape and fits more perfectly to the foot.

American Shooks and Packing Cases, Soap, Toys, and Wall Papers.

American shooks and packing cases for shipping textiles continue in demand, and direct importations are regularly made. American-made flat rolling boards and round wooden rollers for use in folding or rolling cloths are in demand in the district.

American cottonseed hard soap is extensively used in this district for scouring purposes. The superiority of this soap has been so fully demonstrated that a market for it is assured if exporters desire to extend their sales.

American toys, such as dolls, balloons, sledges, wagons, etc., were in demand during the last year. The dealers are always on the lookout for novelties and anything new which meets the popular fancy is quickly taken up.

American wall papers are being supplied by the leading decorative houses and are said to compete favorably with the British product. During last year there was a fair sale in medium and better class qualities and it is anticipated that business will increase. Stocks are carried in London and sample books showing the various designs are supplied to the decorators from which their customers make selections.

Cooperation of Consulate in Extending Sale of American Goods.

Among the numerous inquiries addressed to this consulate from American firms desirous of obtaining information are a number which appear to have been sent to probably every consulate asking for particulars which could often be readily and fully answered by one consul in each country. While attention is gladly given to every letter received, it would certainly be a saving of time and labor if some method could be devised whereby such unnecessary duplication could be avoided.

Rarely do American firms notify the consul as to the results which accrue through information given in letters sent to them as to local conditions, and at times even an acknowledgment of the receipt of such letters or reports is never received at the consulate. This is unfortunate, for whenever such further correspondence is received it is of mutual advantage and interest; supplemental information can be furnished by the consulate to overcome any difficulties or correct any mistakes, and, furthermore, the experience in one case is valuable when dealing with another and perhaps similar case.

Almost without exception the catalogues received at this office have the prices of the goods stated in dollars, which is a serious drawback, as in many cases the foreign merchant will not take the trouble to convert the prices into his own currency. Also the frequent practice of quoting prices f. o. b. at the American factory or seaport is another drawback with firms that are not familiar with trans-Atlantic freight rates.

INTERNATIONAL BUILDING EXHIBITION.

[From Vice Consul Rudolph Fricke, Leipzig, Germany.]

Plans have been completed for the International Building Exhibition to be held at Leipzig from May to October, 1913. It is expected to demonstrate the surprising progress which the art of building has made in the past 20 or 30 years. The official participation of foreign Governments and the great influx of foreign visitors anticipated, especially of State and municipal officers and experts, will afford exhibitors superior opportunities for making valuable connections. The classification plan for exhibits embraces eight sections, as follows:

- (1) Architecture.
- (2) Literature of architecture and building; technical educational institutions; office requisites for architects and engineers.
- (3) Building materials, their manufacture or preparation and use.
- (4) Machines, tools, and apparatus used in building.
- (5) Sale and purchase of building land; building finance; estate agencies; insurances in connection with dwelling houses; bookkeeping for builders and architects.
- (6) Sanitation for dwellings, factories, and streets; protection of workers from injury, first aid and other provisions for their health and comfort; precautions against fire; old-age and invalid insurance.
- (7) Gymnastics, games, and sports.
- (8) Testing of building materials, technical demonstrations.

The exhibits in the various groups may include parts or actual buildings or constructions, and demonstrations as well as models, drawings, photographs, and other appropriate representations.

Further information concerning the exhibition may be secured from the management—No. 1, Windmuehlenweg, Leipzig, Germany.

MEXICAN TRADE STATISTICS.

According to Mexican official statistics, the imports into that country for the last six months of 1911 showed a decrease in value of \$6,873,319 compared with the same period the previous year. The exports out of the country, however, showed a slight gain.

The United States supplied 57 per cent of the total imports into Mexico for last year's period, against 55 per cent for the 1910 period. Of the total exports out of the country during the last six months of 1911, 74 per cent, against 77 per cent in 1910, were destined for the United States.

Trade by Countries.

The following table shows the total value of the imports into and the exports out of Mexico, by countries, for 1910 and 1911:

Countries.	Imports.		Exports.	
	1910	1911	1910	1911
United States.....	\$29,109,226	\$26,153,839	\$53,892,323	\$52,350,022
Austria-Hungary.....	594,773	366,585	5,929	22,440
Belgium.....	1,226,535	971,554	1,617,994	1,516,037
Canada.....	264,299	143,286	321,523	247,595
Central America.....	14,549	17,308	404,309	449,502
China.....	118,104	80,411	3,970	423
France.....	4,658,193	3,602,009	2,027,792	1,796,796
Germany.....	6,700,519	6,043,257	1,667,714	1,859,601
India.....	536,918	503,340		
Italy.....	531,077	399,815	13,181	49,508
Japan.....	127,880	149,682	6,260	75
Netherlands.....	153,364	127,340	4,738	32,467
Spain.....	1,460,711	1,201,981	413,640	737,905
South America.....	458,425	214,491	8,344	5,181
Switzerland.....	341,888	370,973	940	2,448
Other countries.....	6,426,706	5,535,407	9,256,916	11,149,621
Total.....	52,753,167	45,879,848	69,646,573	70,219,691

Of the total imports into the country for the last half of 1911, merchandise valued at \$17,474,178 entered by the port of Vera Cruz, followed by Tampico with \$9,630,296, Nuevo Laredo \$4,814,321, Ciudad Juarez \$3,796,232, Progreso \$1,934,290, Ciudad Porfirio Diaz \$1,334,142, and Coatzacoalcas \$1,134,822.

Principal Mexican Purchases.

The following table shows the principal imports and their value into Mexico for the last six months of 1910 and 1911:

Items.	1910	1911	Items.	1910	1911
Animal products.....	\$4,679,408	\$4,416,292	Vegetable products.....	\$10,975,634	\$6,943,370
Arms and explosives.....	674,431	1,543,230	Vehicles.....	2,229,666	1,339,110
Chemical products.....	3,170,571	2,937,326	Wines, spirits, etc.....	1,609,341	1,447,521
Machinery and apparatus.....	6,336,196	6,468,224	All other.....	2,497,705	2,366,760
Mineral products.....	12,847,130	12,543,928			
Paper and manufactures of.....	1,503,440	1,177,034	Total.....	52,753,167	45,879,848
Textiles and manufactures of.....	6,229,745	4,697,053			

Products of the Country Exported.

Mineral products represent the principal exports out of the country, the total of which amounted to \$45,937,103 for the last six months of 1911, against \$42,603,411 for the same period the preceding year. The shipments of vegetable products amounted to \$17,475,427, a

decrease of \$4,024,166 compared with the 1910 period. The following table shows some of the principal exports from Mexico during the last six months of 1910 and 1911:

Items.	1910	1911	Items.	1910	1911
Animal products and live stock:			Vegetable products:		
Hides and skins, untanned.....	\$3,818,707	\$3,408,592	Beans, kidney.....	\$463,253	\$346,392
Honey.....	51,309	28,013	Coffee.....	1,447,580	1,472,010
Live stock.....	1,399,057	2,539,782	Chickie.....	490,795	447,645
Other animal products.....	256,681	206,895	Chick peas.....	487,852	1,506,946
Mineral products:			Dyewood.....	64,837	130,807
Antimony.....	420,982	436,846	Indian corn.....	33,364	35,766
Copper.....	6,345,457	8,640,284	Lumber.....	739,291	972,153
Gold.....	14,696,318	12,854,496	Rubber.....	9,013,649	5,254,814
Lead.....	1,482,728	1,479,369	Vanilla.....	407,748	626,612
Silver.....	19,325,310	21,724,495	Other vegetable products.....	8,351,426	6,677,282
Zinc.....	170,359	226,825	All other articles.....	1,017,813	1,473,879
Other minerals.....	162,257	574,798	Total.....	69,646,573	70,219,691

Of the total exports for last year's period merchandise valued at \$20,834,808 was shipped by way of Tampico and \$19,661,510 worth by way of Vera Cruz. The exports through Ciudad Porfirio Diaz were valued at \$5,061,957, Progreso \$4,372,140, Ciudad Juarez \$3,344,829, Laredo \$2,969,030, and Nogales \$2,564,962.

THE IRON MINES OF NORMANDY.

[From Consul James E. Dunning, Havre, France.]

Numerous requests for information regarding the iron-ore deposits in this district have reached the Havre consulate in response to a trade opportunity appearing in the February 10 issue of Daily Consular and Trade Reports. Although the quantity of ore produced by the majority of the mines is at present comparatively small, great efforts are being made to increase the output, and in most cases augmentations of production of at least 100 per cent are predicted for 1913. In addition to the mining companies, there has been formed a society which is now erecting blast furnaces in Caen to treat the low-grade ores, the high-grade ores being reserved for export.

The port of Caen, which up to the present has carried on only a small trade in dairy products with the British Isles, is not sufficiently developed to cope with the enormous increase in tonnage which the export of large quantities of iron ore will represent, but active measures are being taken to enlarge the docks and to deepen the channel of the canal leading from the sea to the city. At the time of writing [Apr. 19] the canal can admit vessels up to 3,000 tons burden.

American firms desirous of offering mining or other machinery to the companies referred to [and whose names may be obtained from the Bureau of Manufactures] should do so through their Paris representatives; or in case they have no such agents, it could be done direct by sending catalogues with an accompanying letter in French. Operations are bound to become very large within the next two or three years, and this is one of those numerous cases where direct methods employed in the right quarter should accomplish much. Due notification will be given by this consulate of any opportunity arising for American firms to bid on harbor works at Caen.

[An article by Consul Dunning on the iron-ore deposits of lower Normandy was published on Jan. 26, 1912.]

HUGE EGYPTIAN DRAINAGE PROJECT.

[From Consul D. R. Birch, Alexandria.]

One of the most costly and comprehensive drainage projects for the reclamation of lands undertaken by any Government in the world, and certainly the greatest enterprise of its kind in Mediterranean countries, has just been begun by the Egyptian Government to make cultivable one million acres of fertile land in the delta of Lower Egypt. The reclaiming of these lands will necessitate an expenditure approaching \$15,000,000 for drainage and approximately a like amount for irrigation. The work as planned will require over four years and will be brought to completion about the end of 1915. The principal object of the project is to redeem a tract of unproductive land and bring a fertile but now worthless region of the delta under cotton cultivation. When this is done it is roughly estimated that the increase in value of the reclaimed and improved land will approximate \$100,000,000. The land to be reclaimed is 90 per cent Government owned.

The two projects, known as the West Behera and Gharbia drainage systems, while entirely separate and distinct and many miles apart, will, nevertheless, be proceeded with coincidentally. A feature of the western or Behera plan is the draining of Lake Mariout, which covers an area of over 35,000 acres. This lake, an ancient historical site, will thus disappear forever and be replaced by fertile cotton-producing fields equal to those found anywhere in the world.

The Behera Project.

Considering the Behera project separately, the total land to be placed under effective modern drainage approximates 480,000 acres, of which 330,000 acres are classed as cultivated. The latter area, however, is at present poor in producing qualities, and it is the theory of the Government that when properly drained it will equal for cotton-growing purposes the best of the delta. The remainder is unfit for cultivation of any kind, and comprises the 35,000 acres of Lake Mariout, its arm, Lake Mallaha, and the low swampy land bordering on these lakes. All the territory covered by the Behera project is that which is now drained into Lake Mariout, which in turn is kept 3 meters (9.84 feet) below sea level by pumps at the station at Mex, just west of Alexandria. Lake Mariout is separated from the Mediterranean Sea by a narrow strip of land and is approximately 1 meter (3.28 feet) deep. Twelve high-speed centrifugal pumps will be installed at the Mex pumping station and these will drain the lake and keep the subsoil water to a depth of 5.6 meters below sea level. Each of these pumps is of 1,000 brake horsepower and has a lift of 6 meters.

The Gharbia Project.

The Gharbia project contemplates the draining of 470,250 acres, one half of which is unfit for cultivation of any kind, and in the region comprising the other half and classed as cultivated the only crop raised is rice. All the land in this section is above water and the drainage channels will convey the water down deep drains to Khassa, near Balteem, and there pumped into Lake Borollos, which opens into the Mediterranean. The pumps to be used in this section will probably be of the slow speed turbine class having a lift of 2.5 meters. It

is planned to install 15 such pumps of 350 horsepower each, possibly operated by steam, which is considered as more satisfactory for slow speed. [A map indicating the area of the two sections to be drained will be loaned on application to the Bureau of Manufactures at Washington.]

The Construction Program.

The scope of the work in both districts includes the remodeling of all existing drains and the construction of new trunk drains leading to the pumping stations. All drains will be at a uniform depth of 6 meters; the new ones to be constructed to that depth and existing drains to be lowered 3 meters below their present level. The layout of the drainage system when finished will insure that no individual plot of land is more than 2 kilometers ($1\frac{1}{4}$ miles) away from a public State-maintained drain; and it will further insure that the water surface in such drains will always be at least 1.5 meters (5 feet) below the adjacent cultivable land. Practically every acre of land in the two sections now uncultivable owing to deficient drainage will be provided with a thorough drainage system, and the improvement of the channels of existing drains will facilitate their subsequent maintenance in a high state of efficiency at moderate cost.

The first cost of the work in the West Behera district is estimated at \$6,950,000 and the maintenance of the drains when completed will approximate \$660,000 annually. In the Gharbia Province the first cost will be \$5,960,000 and the yearly expenditure for maintenance \$390,000.

This huge work, so important to the culture of Egyptian cotton, is conjectured to be but the first of a series of similar projects which in years to come will be carried out in Lower Egypt to bring the entire delta under cotton cultivation. It is believed that upon completion of the present work, providing the success hoped for is achieved, that other and larger lakes bordering on the Mediterranean will be drained in the same manner as Lake Mariout and converted into cotton fields.

The necessity for some such project as now begun has long been recognized by the Government. It was one of the first matters to engage the attention of Lord Kitchener, who in November last urged the immediate start of the work and arranged that the Government's 1912 budget provide money from the reserve fund for the preliminary work. Sir William Garston and Mr. A. L. Webb, who act at times as consulting engineers of the Egyptian Government, were called from England and made a careful investigation of the scheme as outlined, and the work will now be carried out as approved by these experts.

The present drainage project is regarded in importance to the future of Egypt as second only to the Assuan Dam. This year will see the completion of the Assuan Dam to its new level, which will mean that in 1913 the dam will hold about two and a quarter times as much water as hitherto and thus provide ample water supply for the irrigation of the land now to be drained.

The Yield per Acre Question.

The prosperity of Egypt lies almost entirely in its cotton crop, which approximates a value of \$100,000,000 annually, and the Government is consequently always alive to the importance of extending the cotton-growing area. At present the cotton fields of Egypt

cover 1,603,266 acres, most of which are in the delta. The crop of 1911 was 650,000,000 pounds, but there has within the past few years been a falling off in the yield of cotton per acre. Several years ago the acre gave 525 pounds of cotton, whereas the same land to-day averages only 440 pounds. One of the problems of the Irrigation Administration concerns the movement of subsoil water. In the lands now to be drained the subsoil water reaches, even on those now classed as cultivable, to within 4 or 5 feet below the ground surface, and thus the feeding root of the cotton plant, which extends $1\frac{1}{2}$ to 2 meters into the ground, is immersed in subsoil water. When the drainage projects are completed the subsoil water in every acre of land in the drained districts will be kept more than $1\frac{1}{2}$ meters below the level, and thus the cotton plant freed from its deleterious influences.

[Some further details concerning pump and dredger outfits for these drainage works may be had from the Bureau of Manufactures at Washington.]

PRODUCTION AND INCREASING USE OF PETROLEUM.

[From the Berlin Export; translated in the Bureau of Trade Relations, Department of State.]

The English coal strike has brought up the question of how and to what extent coal can be replaced by liquid combustibles or other sources of power. The most-favored countries in this respect are probably the Scandinavian, possessing, as they do, in their waterfalls a great source of power. Lately it has been found that the method worked out by a Swedish inventor of firing locomotives with pulverized peat is practical and economically just as advantageous as coal.

However, the use of these resources, water power and peat, is confined to certain countries. It is different with petroleum, which is one of the generally available products of the world.

The total production in America in 1911 was approximately 83,000,000 barrels. In Russia the slackening of the output of the wells in the Baku region became decidedly apparent last year, showing a decrease from 478,000,000 to 427,000,000 poods (57,382,953 to 51,260,504 barrels). The total production of Russian petroleum declined as compared with 1910 by 28,000,000 poods (3,361,345 barrels), and amounted to 554,000,000 poods (66,506,603 barrels). Roumania produced in 1911 somewhat more than 1,500,000 tons (10,785,000 barrels), and exported about 700,000 tons (5,033,000 barrels). As is well known, the industry is carried on almost exclusively with foreign capital, only 10,000,000 of the 280,000,000 marks (\$66,640,000) employed being Roumanian. Germany controls 58 per cent of the total capital.

If coal shall be replaced by petroleum to a considerable extent, it is clear that energetic measures will be necessary to provide suitable ships for the colossal transportation which may be expected. In England there are being built at present not less than 45 tank steamers with 800,000 tons loading capacity, but the demand for petroleum is increasing to such an extent that it hardly can be satisfied. England, for instance, imported last year 343,000,000 gallons (8,166,667 barrels), or 22,000,000 gallons (523,810 barrels) more than in 1910. The way in which these increasing amounts of petroleum are being used may be gathered from the fact that the imports of illuminating oil have decreased 20 per cent, whereas the imports of petroleum for power purposes have increased 150 per cent. The largest imports come from America, Russia being second, and Roumania third.

[A review of the world production of petroleum in 1910 was published in Daily Consular and Trade Reports on Feb. 3, 1912.]

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.

ROUMANIAN BUREAUS OF COMMERCIAL INFORMATION.

[From American Minister John B. Jackson, Bucharest.]

There is transmitted herewith a copy of a pamphlet entitled "Réglement Concernant l'Organisation et le Fonctionnement des Bureaux Régionaux d'Informations Commerciales," which I have just obtained from the Roumanian Ministry of Industry and Commerce. The 11 "regional" bureaus of commercial information referred to in this booklet have been organized with a view to their working in connection with local chambers of commerce to obtain and disseminate information tending to develop Roumanian commerce. They are ready to furnish such information to all interested persons and to give indications in regard to the commercial standing of merchants at home and abroad—always without accepting any responsibility in the premises.

The booklet gives the following statistical information relating to Roumania:

Principal products.—Cereals, vegetables, grains, lumber, and petroleum (the production of petroleum was 1,418,518 tons in 1911).

Government-aided industries.—Fixed capital, \$53,481,922; products, \$66,778,000, divided approximately as follows: Textiles and manufactures, \$3,492,000; foodstuffs, \$23,932,000; paper and cellulose, \$2,702,000; chemical and electrical articles, \$14,089,000; miscellaneous products, \$17,563,000.

Foreign commerce in 1910.—Imports, \$79,075,106; exports, \$118,985,440.

Railways.—Length, 1,980 miles; amount actually expended, \$166,570,674; nominal capital, \$183,392,261; net revenue, \$6,021,538.

Navigation.—State River service on the Danube, 127 ships, of which 11 are for passengers. Roumanian maritime service (belonging to the State), 12 vessels, of which 5 are mail boats carrying passengers and 5 are freighters.

Rural cooperation.—2,656 rural banks, with a paid-up capital of \$11,773,000.

National bank.—Statistics for 1911: Notes issued, \$98,352,242; metal reserve, \$30,559,197; gold drafts, \$11,843,777.

[The pamphlet referred to in the foregoing report, which is printed in French, will be loaned upon request by the Bureau of Manufactures.]

CONSULAR TRADE CONFERENCES.

Francis Miltoun Mansfield, American consular agent at Toulon, France, now in the United States on leave of absence, will be pleased to meet business men to discuss trade conditions in his district. Mr. Mansfield is familiar with road conditions in Europe affecting the type of automobile best suited to various localities and can especially inform those interested in regard to the market conditions in France for American automobiles. His address until June 15, 1912, is Hotel Avon, Thirtieth Street and Lexington Avenue, New York City.

SEAL FISHERY OF NEWFOUNDLAND.

[From Consul James S. Benedict, St. Johns.]

The sealing voyage for 1912 closed May 11, with the discharge of the last of the fleet of 23 steamers engaged in the fishery. The total number of seals landed was 175,128, valued at \$329,104, which is only about half an average voyage. The catch is 129,463 seals short of last year and \$164,530 less in value. The loss to the suppliers is almost unprecedented, while practically half the crews made less than the cost of supplies advanced them; 4,176 men were engaged in the fishery, and every man returned safely to port.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8912. Pumps and dredging.**—An American consul reports that an excellent opportunity is open to American pump manufacturers and dredging contractors in connection with a scheme begun by a foreign Government to reclaim a vast amount of land. It is roughly estimated that \$30,000,000 at least will be spent by the Government within the next four years in the drainage and irrigation work on this tract of land. The Government officials have expressed a hope that American firms will submit bids for both the machinery required and for the dredging to be done. Copy of the complete report, giving further detailed information, will be sent to interested firms by the Bureau of Manufactures; also map of the region to be drained.
- No. 8913. Electrical signs.**—The Bureau of Manufactures is in receipt of a communication from an American forwarding firm stating that one of its correspondents in a European country has written that it is interested in electrical moving signs. Houses making a specialty of this class of work are requested to send catalogues and any other information that would prove useful. Communications, etc., should be sent direct to the foreign firm.
- No. 8914. Railway supplies and steel building material.**—A foreign Government will at an early date solicit bids for a large quantity of rails, fishplates, and rail rests for both its broad and narrow gauge roads. The exact date will be determined on shortly. An American consul has had several conferences with the official in charge of this matter and the latter has manifested a keen desire that American firms should take part in submitting proposals, and, if possible, to secure the order. Other construction work is being contemplated in the country in question, and proposals will be received in the near future for the construction of port works, bridges, etc. Considerable quantities of steel building material will be needed, and the securing of this contract will undoubtedly open a vast field for American steel products, in addition to other articles which will be required. Copy of the complete report, specifications which accompanied it, and other particulars can be obtained by interested firms upon application to the Bureau of Manufactures.
- No. 8915. Iron bridges.**—Supplementing a previous report on the demand for iron bridges and road machinery in which a foreign Government is interested, an American consul now reports that detailed information concerning the cost of iron bridges is desired by an official at the earliest possible date. Catalogues and other information should be sent direct to the official, and it would be well also to communicate with another person whose name is given in the report.
- No. 8916. Petroleum, benzine, and heavy oils deposit.**—An Italian company proposes to erect a new deposit for petroleum, benzine, and heavy oils in proximity to an important Mediterranean seaport. It is proposed to keep in stock 12,000 cubic meters of petroleum and 2,000 cubic meters of benzine and heavy oils, subject to increase in proportion to the successful operation of the enterprise. The plant is to consist of eight departments, as follows: General offices; pumping appliances; weighing apparatus; storeroom for timber and tinplates; workshop for the manufacture of tins and wooden packing cases; room for filling petroleum tins; room for filling benzine tins; and storeroom for filled tins. The company desires to communicate with American concerns able to furnish the oil and eventually disposed to invest capital. In the latter event the company would intrust the American firm with the technical management and supervision of the plant.
- No. 8917. Cotton goods, phosphates, metals, copper plate and wire.**—An American consular officer in a European country reports that a business man in his district desires to represent American firms dealing in cotton goods, phosphates, metals, copper plate and wire.
- No. 8918. Trunks and handbags.**—A business man in a Mediterranean country informs an American consulate that he desires to communicate with American manufacturers of trunks and handbags. American goods of this class are unknown at present, but the inquirer, who is an American, believes they can be introduced. Goods of cheaper grades are desired, and prices should be quoted c. i. f. point of destination. Correspondence in English.

DAILY CONSULAR AND TRADE REPORTS

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15th Year

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TRADE OF DUTCH PORTS.

AMSTERDAM.

[By Consul Frank W. Mahin.]

In spite of the strike of the seamen and dock laborers and the remarkable heat and drought of the summer, all the industries in this region were unusually active and reasonably profitable during 1911, with the exception of the hotels, boarding houses, and the shops which depend on the tourist trade. Owing to the excessive heat and the interference with transportation caused by the strike, the number of visitors in Amsterdam was about 20 per cent below the 1910 figure. This discouraged the project broached in 1910 for a new first-class hotel, which then seemed to be much needed. The Turco-Italian war had no appreciable effect on the business of this district. Although business generally was active, the percentage of unemployed workmen was relatively high in this district.

The Amsterdam Stock Exchange was relatively quiet during the year. The interest in American securities, in which Amsterdam generally invests more heavily than in those of any or possibly all other countries, decreased. Petroleum shares figured actively on the stock exchange, while mining shares declined. Shares of Dutch colonial industries were generally profitable and there was a particularly strong market for sugar and tobacco stocks. The profit on both the Sumatra and Borneo tobacco crops was about 40 per cent higher than that of 1910. The high prices of sugar naturally affected sugar stocks. The increased colonial activity raised the prices of shares of the East Indian tramways. An effort was made to press tea shares last year, but too frequent emissions and other unfavorable circumstances put them again in the background. Dutch national securities and those of South American countries maintained steady prices, but those of China, Japan, and some European countries ruled low. In

contrast to the stock branch of the exchange, the produce branch was uniformly lively during the year.

Harbor Improvements—Shipbuilding.

Several important improvements to the Amsterdam harbor were completed during 1911, providing a considerable increase of dock room. Other projects, still unfinished, will provide new quays and materially enlarge existing basins, with special reference to the accommodation of the largest type of steamers, for which the dock facilities are now inadequate. Accessory to these improvements, plans were framed for greater locks at the sea entrance of the North Sea Canal, to admit the largest vessels that may be expected at this port. This improvement will be made as soon as the necessary preliminaries are completed.

During 1911 the arrivals of seagoing steamers at Amsterdam numbered 2,165, of 10,001,864 cubic meters capacity, and sailing vessels, 195, of 111,879 cubic meters capacity, an increase of 8 steamers and 65 sailing vessels over 1910. The substantial increase in the number of entrances and clearances of Dutch ships seems to justify the claim that they are displacing foreign ships in the home trade. The arrivals from every other country, except the United States, Denmark, Spain, Russia, and Italy, decreased, and the combined increase of those five countries amounted to only 19 vessels. One American ship arrived and cleared in 1911, none in 1910.

Further evidence of the shipping revival in the Netherlands is the great activity in Dutch shipyards, which could not fill all the orders offered them in 1911. In several cases ships were built in British yards, as the orders could not have been filled here for a year or more. More ships were under construction in Dutch yards in former years, but never so large a volume of tonnage.

The principal shipbuilding firm in Amsterdam finished in 1911: Two steamers of 2,000 and 8,076 gross tons, respectively; a floating dry dock of 12,000 tons; a steam tug of 184 tons; and a motor ship of 372 tons. At the end of the year the same company was building seven steamships, ranging from 160 to 9,000 tons; two motor tank ships of 2,400 and 4,500 tons, respectively; a dredging machine of 1,700 tons; a steel floating dry dock of 14,000 tons; and a floating steam crane with a lifting capacity of 12 tons.

Motor Warships—New Passenger Steamers—Canal Navigation.

At the Government navy yard here, three coast-defense motor vessels of 540 tons displacement, armed with 4-inch guns, were under construction at the end of the year. The Netherlands is said to be the first country to build motor warships.

A number of smaller ship and boat building concerns turned out a large number of craft of various kinds during 1911 and were busily engaged at the end of the year. Two mail steamers, of 14,000 tons and carrying 1,800 passengers each, are to be built for a shipping company for the South American trade, with a speed that will reduce the time of voyage to 14 days. These are expected to be launched in 1913.

The principal entrances to the harbor of Amsterdam are through the North Sea Canal, the Zuider Zee, and the Merwede Canal connecting with the Rhine River. Through the locks at the mouth of the North Sea Canal, 2,268 steam and 12,280 sailing vessels passed in 1911;

through the Zuider Zee locks near Amsterdam, 25,798 steam and 44,017 sailing vessels; and through the Merwede Canal, 5,616 steam and 21,547 sailing boats. Navigation was at no time interrupted by ice.

The Diamond Industry.

The demand for diamonds was good in 1911; brokers received their usual percentage and general dealers realized fair profits. The diamond workers fared well, as wages were steady and employment regular, though two strikes during the year made the number of idle workmen unusually large at times.

On the other hand, the proprietors of diamond-cutting factories describe 1911 as a particularly bad year. It is common report that they all lost money, though none failed. It is said that no actual failure has occurred in this industry in Amsterdam for many years. The diamond-cutting firms are forced to continue operations even at a loss or lose valuable customers, who would go elsewhere and perhaps never return, and lose their skilled workmen, whom they might not be able to replace.

The difficulty besetting the cutting industry last year is charged to the London rough-diamond syndicate, which fixes not only the primary but also the ultimate price of diamonds. An Amsterdam diamond expert writes as follows on this and other points:

The London syndicate puts continuously higher prices on the rough goods, or sells goods of an inferior quality at the same prices. Consequently the polished diamonds ought to be sold at much higher figures.

There is no doubt but that the diamond business is on a good basis. There are of course always certain articles the prices of which are subject to more or less important changes, but the principal articles, especially large goods, are at least 15 to 20 per cent higher than in the beginning of 1911, and in the near future we will see much higher prices.

The bigger exports from Antwerp to the United States which are shown by the statistics are not a consequence of a larger business, but many goods bought in Amsterdam are taken along by the buyer to Antwerp and shipped from that city to New York. On top of that, many Amsterdam brokers and dealers go to Antwerp every week and sell goods there which are also shipped from Antwerp and thus enlarge the amount of the exports.

Generally speaking, the medium qualities of diamonds were preferred in last year's trade. The rose branch was rather quiet.

Diamond Markets—Labor—New Diamond Exchange.

While Amsterdam's diamond trade with the United States showed a slight decrease, the trade with European countries increased, though no statistics are compiled showing the volume of that trade.

The expectation, some time ago, that there might be an overproduction of rough diamonds shows no signs of realization. The De Beers mines, by alleged careful limitation, produce a regular annual quantity, stated to be from 2,200,000 to 2,500,000 carats. Several years ago, a large and increasing output from the German South African mines seemed probable. Their production increased from 486,000 carats in 1909 to 798,000 in 1910, but as the 1911 product is reported to be much the same as that in 1910, the fears of overproduction from this source are allayed, and even a decrease in the output of these mines is predicted.

The number of organized workmen in the diamond trade of Amsterdam is now about 10,000, besides which there is a considerable number of unorganized workers. It is expected that over 1,000

apprentices will be admitted during 1912, most of them being children of diamond workers.

The large diamond-exchange building [described in Daily Consular and Trade Reports for Jan. 14, 1911] was opened in 1911. It contains a post office, safety deposits, assembly rooms, etc., and is daily visited by hundreds of people interested in the diamond business. Thus the entire trade, both wholesale and retail, rough and polished, is focused in one building.

Sugar Market Strong.

Although the drought of 1911 so affected the beet crops of Europe that the world's stock at the end of the year was short over 500,000 tons, the total beet crop of the Netherlands amounted to 1,720,000 tons, producing 252,000 tons of raw beet sugar, 39,000 tons more than the 1910 production. The shortage led to the importation of five ship-loads of raw cane sugar from Java, which had not occurred for many years. An effort is being made to establish a regular market for cane sugar here, such as formerly existed. The price of raw sugar in 1911 fluctuated between \$4.32 and \$8.04 per 100 kilos (220.46 pounds). In 1910 the range was from \$5.23 to \$7.24. The average price of refined sugar in 1911 ranged from \$6.23 to \$10.85.

The following table, prepared by the manager of an Amsterdam sugar refinery, gives the consumption, production, imports, and exports of sugar in the Netherlands for the past two years:

Varieties.	1910	1911	Varieties.	1910	1911
CONSUMPTION.			IMPORTS.		
Raw.....	<i>Met. tons.</i> 435	<i>Met. tons.</i> 365	Raw.....	<i>Met. tons.</i> 177,544	<i>Met. tons.</i> 190,524
Cane.....	3,073	2,700	Cane.....	62,230	48,069
First marks.....	13,687	10,130	Bastard.....	48,525	78,134
Refined.....	72,396	79,103	Total.....	288,299	316,727
Candied.....	2,087	2,213	EXPORTS.		
Bastard.....	13,243	11,743	Raw.....	186,128	183,181
Total.....	104,920	106,264	Cane.....	45,438	35,428
PRODUCTION.			Refined.....	141,948	200,752
Raw.....	177,341	210,658	Total.....	373,514	419,361
First marks.....	35,784	42,035			
Total.....	213,125	252,693			

Increased Use of Coffee Substitutes—Tea and Copra Markets.

The actual consumption of coffee is said to have decreased, despite the larger import in 1911, partly because of the advanced price and partly because of the greater use of substitutes for coffee. Factories producing these substitutes for coffee have largely increased in Europe in recent years, and the quantity of these substitutes consumed in the Netherlands is evidently important, although no estimate is made as to the amount. Several Dutch factories make coffee substitutes from chicory and various grains, while there are said to be 116 similar factories in France, 412 in Austria-Hungary, and 732 in Germany.

The imports of tea into Amsterdam in 1911 totaled 26,274,600 pounds, of which 13,260,800 pounds came from Java. The 1910 total was 30,237,500 pounds. Most of the exports of 15,251,600 pounds went to Germany and the British Isles. The value of the tea ex-

ported to the United States was declared at this consulate as \$35,448, but it is said that a large amount of tea for the United States is shipped through London.

The amount of copra marketed in Amsterdam in 1911 was much larger than that sold in the preceding year and was valued at \$20,100,000.

Leather and Shoe Trade—Other Industries.

Of the 15 or 16 tanneries in this consular district, 2 are very large and several others are important. The larger tanneries work especially on leather belting for export to the British Isles, while the smaller cater only to the local trade. The past year was a trying one for these tanneries, as the prices of hides were very high in proportion to the prices of leather. The trade in hides was about normal, most of the exports of cowhides going to Germany, Belgium, and France, while the calfskins were mostly sent to the United States.

The shoe manufacturers complained of the high prices of both leather and labor, and some reduced the quality of their products. It is predicted, however, that those who maintained their quality and raised their prices will do better in the future. Some manufacturers make good profits by exporting their goods.

The usual quantity of American shoes were sold here during the past year. Besides an American shoe store, many shops display American shoes prominently in their windows and others display shoes marked "American patterns," etc. A "Sorosis" store is soon to be opened here.

The timber and lumber market was lively in 1911, largely on account of the building activity. The prices of Russian and Swedish wood varied little, but that of American fir rose steadily.

The hot, dry summer made 1911 a remarkably good year for the breweries, of which there are some 200 in this district. The great demand for hops caused an increase in their price. Cigar manufacturers did well in the export business, but orders from the local dealers were comparatively few on account, it is said, of a tariff pending in the Netherlands Parliament changing the taxes on tobacco products.

The bicycle and automobile trade is reported to have been both large and profitable last year. The use of automobiles is spreading rapidly in Holland, and the output of all the local factories was completely sold in 1911. They are expected to increase their capacity and product in 1912. American automobiles grew in favor, and the imports, while small, showed a strong tendency to increase toward the latter part of the year. Most of the imported automobiles come from France, Germany, and Belgium.

Exports to the United States.

According to the invoices declared at this consulate, the exports from Amsterdam to the United States in 1911 showed an increase of \$1,197,102 over those of 1910, due to the increased shipments of tobacco, made chiefly on account of the higher prices prevailing. The fluctuations in the values of the other articles practically balanced each other.

Exports of coffee, linoleum, oils, rags, and tin have increased in value for several years past, as the demand in the United States has increased and the resources of this market have become better

known. The exports of kapok, rice, and tapioca flour have been declining for a long period, owing to a decreasing demand from the United States.

The principal exports to the United States during the past two years, as declared at the Amsterdam consulate, are shown in the following table:

Articles.	1910	1911	Articles.	1910	1911
Antiquities.....	337,211	\$42,809	Paintings.....	965,686	\$108,093
Bagging, jute.....	13,535	15,164	Paper.....	24,572	15,877
Bark, cinchona.....	271,432	275,357	Pepper.....	43,214	120,734
Biscuits.....	20,272	11,377	Potato flour.....	31,195	58,288
Bulbs and plants.....	107,039	100,913	Printed matter.....	62,067	4,831
Capsules, metallic.....	80,932	24,136	Provisions:		
Cassia.....	18,930	21,059	Casings.....	267,538	241,071
Cloves.....	23,278	1,967	Cheese.....	141,591	115,806
Cacao and products:			Hams and bacon.....	24,995	26,033
Beans.....	140,141	146,071	Quinine.....	96,043	119,578
Butter.....	486,425	950,057	Rags, etc.....	56,623	135,643
Chocolate.....	33,108	41,153	Rice.....	262,832	236,395
Cocoa.....	360,623	302,509	Rice flour.....	19,832	25,348
Powder.....	31,984	46,506	Rubber.....	14,834	30,975
Coffee.....	244,290	315,718	Sardels.....	8,397	7,187
Hair combs.....	9,901	8,578	Seeds:		
Cotton goods.....	36,071	6,417	Caraway.....	32,247	92,663
Cotton waste.....	37,760	37,898	Garden.....	142,968	142,779
Cubebs.....	20,479	20,510	Other.....	55,585	79,732
Diamonds:			Shells.....	87,316	87,526
Polished.....	9,873,321	9,331,246	Spices.....	14,530	25,755
Rough.....	782,432	749,005	Steel.....	16,944	.....
Drugs and chemicals.....	1,930	12,930	Straw pulp.....	5,619	9,267
Frou-frou.....	114,827	78,601	Sugar.....	120,881	.....
Gum, copal.....	11,080	19,967	Tapioca flour.....	34,794	19,973
Hides and skins.....	301,180	498,223	Tea.....	33,864	35,448
Kapok.....	63,907	24,080	Teak fitches.....	50,010	16,681
Lanoleum.....	22,728	39,521	Tin.....	157,512	271,700
Liqueurs and gin.....	98,911	23,732	Tobacco.....	5,826,605	7,074,063
Mace.....	38,926	33,351	Tobacco mats.....	8,854	6,789
Magnesia.....	42,560	37,313	Vegetables.....	29,661	17,014
Nutmegs.....	17,146	19,325	Wood, ebony.....	14,174	20,188
Oils:			Wool.....	51,499	.....
Haarlem.....	30,348	34,289	All other articles.....	115,937	114,387
Other.....	246,588	332,681			
Paints.....	45,561	49,008	Total.....	21,680,245	22,887,347

The exports to the Philippine Islands for 1911 were valued at \$41,394, a decrease of \$1,929 compared with the previous year. The principal articles for 1911 were as follows: Margarin, \$19,031; cheese, \$18,975; and cotton goods, \$2,365. The exports to Porto Rico amounted to \$58,908, compared with \$71,391 for 1910, and consisted practically entirely of cheese.

Imports of American Flour—Office Appliances—Cost of Living.

On the whole, direct and indirect imports from the United States to Amsterdam were greater than in 1910, though the statistics are not sufficiently specific to give detailed figures thereof. The aggregate import of flour decreased last year, but a larger quantity came from the United States than in 1910. The import from Germany decreased in about the same quantity as the American increased. According to the explanation of a local dealer, certain export inducements of the German Government were so modified that importing flour from that country was made relatively unprofitable in 1911.

The manager of an American office-supply company here reports a flourishing and expanding business with an American typewriter in which his firm specializes, but states that continental factories are making both flat and roll-top desks substantially as good as the American product, but at prices so much lower that his company is obliged to deal in them to hold its general trade. All the well-

known American typewriters are specially represented here, and they lead all others in use and popularity. An international exposition of office supplies in Amsterdam in 1911 brought American typewriters, adding machines, and calculating machines into comparison with similar products of the other countries, to the advantage of the American products.

The general upward tendency of the prices of commodities during the past 15 years was sharply accentuated in 1911 by the drought and excessive heat of the summer. Nearly all foodstuffs advanced in price, some vegetables rising 100 to 500 per cent. Bread was an exception, being a little cheaper at the end of the year than at the beginning. Fresh beef advanced 5 to 10 per cent, but veal, pork, and mutton remained practically stationary. Fresh fruits advanced somewhat in price, although not as much as vegetables, and the prices of canned and bottled fruits and vegetables also rose 10 to 20 per cent. Butter and cheese increased about 10 per cent, while eggs and poultry remained at about normal prices.

General Import Trade.

The table following shows the official Government records of the principal imports and exports at the port of Amsterdam during 1911. Germany was the largest single source of imports, supplying most of the agricultural and other machinery, nearly half of the drugs and paints, four-fifths of the coal, half of the dry goods, two-thirds of the stone, metals, and metal products, and most of the raw sugar. Belgium ranked second. The United States led in the flour imports, with more than one-third of the total; Russia led in grain imports; and Roumania sent as much corn as was credited directly to the United States. Other important items from the United States were fine woods, margarin, cottonseed oil, petroleum, lard, and fruit. (The metric ton is 2,204.6 pounds.)

Articles.	Imports.	Exports.	Articles.	Imports.	Exports.
	<i>Mct. tons.</i>	<i>Mct. tons.</i>		<i>Mct. tons.</i>	<i>Mct. tons.</i>
Agricultural and other machinery.....	27,807	19,006	Oils:		
Beer and malt extracts.....	3,758	10,658	Cottonseed.....	1,748	1,559
Breadstuffs:			Sesame and other edible.....	3,983	4,339
Wheat.....	9,445	1,992	Petroleum.....	96,799	32,465
Rye.....	7,140	3	Palm oil and others.....	76,775	84,217
Barley.....	17,885	1,953	Olive pits.....	4,230	2
Maize.....	31,833	1,156	Paper.....	29,494	27,750
Oats.....	3,466	1,861	Potato flour, manufactures of.....	15,306	33,264
Buckwheat.....	7,653		Rags.....		9,719
Rice.....	96,995	72,282	Rattan for binding.....	17,919	12,680
Wheat flour.....	20,927	2,684	Salt.....	17,019	950
Rye flour.....	31,684	22,675	Seeds.....	125,395	12,148
Cheese.....		7,685	Spices.....	11,903	9,264
Coal.....	418,994	50,734	Spirits.....	3,288	4,915
Coffee.....	53,937	24,360	Stone.....	80,478	54,460
Drugs, paints, and chemicals.....	117,975	71,044	Sugar:		
Dry goods.....	13,418	14,462	Raw beet.....	47,528	12,898
Earthenware and porcelain.....	15,753	14,082	Raw cane.....	42,435	26,683
Fish.....	1,000	7,337	All other.....	7,794	116,010
Flax and hemp.....	15,936	423	Sulphur.....	10,902	7,995
Fruits:			Tallow, soot, and grease.....	10,325	6,233
Fresh.....	65,577	22,515	Tea.....	12,937	10,076
Currants.....	14,160	2,052	Tobacco and cigars.....	52,412	45,724
All others.....	20,138	12,024	Wine.....	36,852	30,716
Glass and glassware.....	14,821	8,309	Wood:		
Groundnuts.....	8,312	1,793	Pine.....	7,350	4,339
Haberdashery.....	11,251	6,133	Shipbuilders' and carpenters' wood.....	341,436	36,798
Hides, skins, and leather.....	9,679	7,130	Dyewood.....	4,460	4,347
Metals:			Wool.....	5,075	4,631
Raw.....	182,966	140,248	Yarns.....	8,711	6,838
Wrought.....	118,552	101,320			
Molasses.....	9,378	11,522			

Farming—Land Values—General Statistics.

The general drought throughout Europe benefited the farmers of most of the Netherlands, as their low-lying, irrigated farms produced crops of a fair quantity which brought unusually high prices. This prosperity did not extend to the live-stock industry, as the drought seriously impaired the pastures and reduced the yield of hay. To increase the difficulties of the cattle breeders, the foot-and-mouth disease broke out in the early summer and ran its course in spite of strenuous attempts to check it, dying out toward the end of the year. The disease is said to have come from Russia via Germany.

Land values have increased considerably in this vicinity in the last two years, \$400 per acre being a not unusual price for farm land, and rents of \$18 to \$20 an acre are not uncommon.

The population of Amsterdam was 581,000 at the close of 1911, a gain of 7,000 during the year. The city has grown at about the same rate for the past 10 years, this being substantially the difference between the births and the deaths. Immigration and emigration practically offset each other. The annual birth rate per 1,000 in Amsterdam is about 24 and the death rate 12. The number of houses built during the year was 1,100, a gain of over 100 over 1910. The total number of emigrants from Amsterdam in 1911 was 3,403, an increase of 212 over the previous year. Of these, 80 went to the United States and 3,226 to South America. Only 411 of the emigrants were Dutch.

The municipal tramways of Amsterdam carried 78,521,600 passengers in 1911, against 70,788,946 in the preceding year. The receipts in 1911 amounted to \$1,501,552, an increase of \$101,552 over 1910.

Of the 103,850 travelers registered at the 13 most important hotels, 14,129 were Americans, more than from any other country except Belgium. No compilation is made of the registrations at the many smaller hotels and pensions, which must far outnumber those of the 13 hotels.

There were 11,384 subscribers to the municipal telephone service at the end of 1911, an increase of 927 over 1910.

At the municipal abattoir 37,950 beeves, 33,387 calves, 9,296 sheep, 68,336 hogs, and 6,246 horses were slaughtered for food during the year. This was a decrease in beeves and an increase in all the other animals, in comparison with 1910. The figures indicate that mutton, although cheaper than beef, is a relatively unpopular food. At the present rate of increase, the horses slaughtered at the municipal abattoir will soon outnumber the sheep.

The municipal plants supplied 87,135,661 cubic meters (cubic meter = 35.3 cubic feet) of gas, 23,464,143 kilowatts of electric current, and 20,687,944 cubic meters of water. There were 1,454 fires in Amsterdam during the year, against 1,232 in 1910.

Foreign Trade of Harlingen.

Harlingen, a seaport on the Friesland coast, behind the chain of islands separating the Zuider Zee from the North Sea, does a brisk business and is the chief outlet for the products of the farms and paper and pasteboard factories of Friesland and the neighboring Provinces. The strike of the seamen and the drought reduced the volume of trade at this port during 1911. The steamer arrivals in 1911 numbered 378, of a gross capacity of 937,151 cubic meters, against 408, of 1,040,829 cubic meters, in 1910. Practically all the exports

from this port are products of the Netherlands. The following table shows the principal imports and exports at this port during 1911:

Articles.	1910	1911	Articles.	1910	1911
IMPORTS.			EXPORTS.		
Cement.....metric tons..	7,647	7,634	Butter.....metric tons..	6,992	4,553
Coal.....do.....	161,845	137,826	Cheese.....do.....	4,530	3,554
Coke.....do.....	7,647	7,634	Fish.....do.....	6,079	4,881
Iron, raw and wrought, value.	\$53,092	\$53,733	Iron ore.....do.....	4,188	1,761
Linseed cakes and flour, metric tons.....		11,379	Meat.....do.....	3,504	3,201
Rags.....metric tons.....	0,027	3,961	Paper and paper board..do...	109,143	84,382
Salt, German.....do.....	7,338	6,035	Peas.....do.....	1,888	1,618
Spirits.....gallons.....	1,547	1,381	Peat moss.....do.....	2,659	2,446
Suet.....metric tons.....	2,466	2,329	Potatoes.....do.....	6,868	3,562
Yarns.....value.....	\$51,828	\$44,548	Spirits.....gallons.....	720	1,567
			Vegetables.....metric tons..	2,441	1,537

ROTTERDAM.

[By Consul General Soren Lister.]

The city and port of Rotterdam, in the main, prospered in 1911. The uncertainty in trade caused by disturbances in various countries acted as a drawback on merchants and shippers, and the drought affected trade as well as prices. As beet-sugar contracts were based on the lower values, only the speculators profited by the rise caused by the drought. Unfavorable weather in the producing regions also advanced the price of rice, but the quality suffered and the imports may give the traders cause for regret.

American Import Trade Increasing.

The imports of the usual staple articles from the United States increased in quantities and values during 1911, and dealers state that the importations of American machinery, machine tools, kitchen ranges, and high-grade bathroom articles have increased materially. Lumber and staves have also been imported in increased quantities. The imports of American flour and meats at this port are on the decline, however. Reliable information places the imports into the Netherlands of dry-salted meats (pork) in 1911 at 4,000 boxes and 250 barrels, of casings at about 300 tierces, and of canned meats at between 6,000 and 7,000 cases. American canned meats, which until recently had practically a monopoly on this market, are suffering from the keen competition of canned goods from Argentina, and American packers are advised to take the necessary steps to meet this competition if they wish to retain control of the European markets.

A prominent importer of American machinery and machine tools writes this office as follows:

The present trade in American machine tools seems to be progressing gradually, and it appears that Dutch manufacturers who did not formerly always look for the best and most economical machine are now asking more for quality than for price. German competition against high-class American machines is growing. The German manufacturers copy the best American makes, make them a little more substantial, try to give them good workmanship, and sell them at much lower prices. However, American machine tools are asked for by leading firms in the Netherlands on their good name and reputation. It is regrettable that some American manufacturers are selling poor stuff on the good name of their fellow manufacturers, which hurts the business of the first-class makers.

If American manufacturers want to sell their goods readily in our market, they should take all possible steps to get a stock here for exhibition and sale. They should also study carefully and constantly the situation here in order to keep their share of the business.

General Exports and Imports.

The following table shows the imports and exports of the principal articles at Rotterdam in 1910 and 1911, in tons of 2,000 pounds:

Articles.	Imports.		Exports.	
	1910	1911	1910	1911
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Asbes.....	10,682	12,214	6,778	9,982
Bark.....	6,194	6,305	1,855	2,024
Beer, and malt extract.....	11,828	12,745	10,702	10,707
Breadstuffs:				
Barley.....	826,050	944,471	550,200	663,625
Buckwheat.....	10,160	16,658	4,531	5,459
Corn.....	468,731	610,117	104,083	126,843
Flour, wheat.....	104,406	122,053	27,775	16,608
Flour, rye.....	58,505	65,990	56,152	57,422
Oats.....	501,503	546,483	307,075	415,598
Rye.....	535,215	678,234	331,865	385,107
Wheat.....	1,950,695	1,626,569	1,592,749	1,289,105
Other.....	66,499	75,790	50,333	54,430
Coal.....	1,431,995	1,507,205	3,174,703	3,509,301
Coffee.....	77,283	87,438	52,742	60,418
Cotton, raw.....	25,667	33,105	15,073	14,828
Dry goods.....	39,640	40,406	47,749	46,837
Drugs, chemicals, etc.....	267,337	31,564	184,238	215,335
Earth-ware, etc.....	47,163	61,787	36,109	43,223
Fertilizer.....	321,284	406,109	128,183	130,049
Fish.....	26,714	24,955	94,413	71,082
Flax and hemp.....	26,651	32,610	21,358	10,714
Fruits.....	75,485	75,991	57,371	42,904
Glass and glassware.....	26,397	26,005	38,164	37,447
Hides and skins.....	31,438	37,407	25,698	27,303
Machinery.....	55,206	67,099	37,884	43,359
Metals, and manufactures of, n. e. s.....	850,597	1,005,436	1,027,073	1,151,331
Mercury and toys.....	37,655	46,798	31,813	36,238
Nuts:				
Palm nuts.....	46,013	41,544	43,586	47,312
Peanuts.....	60,319	43,922	12,798	13,206
Oils:				
Cottonseed.....	30,175	40,018	19,698	22,532
Fish.....	9,381	13,564	7,231	8,579
Oleo.....	23,513	40,980	18,198	22,332
Peanut.....	2,679	1,982	7,274	8,859
Petroleum.....	298,280	363,663	212,763	230,432
Sesame, etc.....	16,305	15,093	16,717	12,006
Other.....	255,958	331,243	253,736	285,072
Paper.....	82,400	91,579	101,050	77,030
Provisions:				
Butter.....	1,834	2,379	1,515	1,301
Cheese.....			23,497	21,831
Lard.....	12,718	39,472	11,461	19,017
Meat.....	2,715	5,023	9,548	6,872
Tallow, etc.....	61,041	44,229	30,008	29,062
Rags.....			436,850	473,636
Rice.....	160,342	101,835	103,608	96,869
Salt.....	36,404	48,019		
Seeds.....	207,920	141,127	52,141	46,206
Sirup and molasses.....	18,665	17,867	13,911	12,521
Spices.....	4,506	6,662	5,304	6,651
Spirits.....	19,736	17,430	35,038	30,392
Stone.....	206,292	205,553	237,055	221,522
Sugar.....	199,223	213,829	196,227	189,431
Tar and pitch.....	10,218	20,480		
Tobacco, and manufactures of.....	44,528	60,760	26,960	30,811
Wine.....	46,024	44,780	41,780	41,301
Woods.....	1,673,372	1,904,974	1,059,192	1,157,184
Wool.....	7,825	9,807	7,265	7,788
Yarn.....	37,364	41,780	15,730	16,982

Lumber and Timber Imports.

One of the largest importers of American lumber in Rotterdam gives the imports from the United States as 80,333,435 superficial feet of lumber and 25,622,617 superficial feet of timber in 1911. The corresponding figures for 1910 were 73,932,089 and 22,276,102 superficial feet, respectively. Prices in 1911 were steady up until late in the fall, when they increased. As stocks on the Continent have been considerably lowered, there should be numerous transactions as soon

as improved shipping facilities are provided. The following were the prices per standard paid at the end of 1911 (standard=165 cubic feet): Prime lumber, 11-inch and up, \$92; prime lumber, 8, 9, and 10 inch, \$82.50; heart face floorings, 1 by 6 and 1 by 4 inches, \$80; kiln-dried saps, 1 by 6 inches, \$70.50; kiln-dried saps, 1 by 4 inches, \$65.50. Sawn pitch-pine timber sold for \$18.25 per load of 50 cubic feet.

Exports to the United States.

The principal exports to the United States during 1910 and 1911, as invoiced at this consulate and its agencies, are shown in the following table:

Articles.	1910	1911	Articles.	1910	1911
ROTTERDAM.			ROTTERDAM—continued.		
Antiquities.....	\$10,719	\$6,307	Spiegel iron.....	\$239,239	\$120,758
Balances and weight.....	18,444	18,036	Straw covers.....	40,982	39,001
Books.....	24,135	22,214	Tea.....	9,541	11,724
Bottles.....	7,923	7,169	Tin.....	414,521	1,899,832
Bulbs and flower roots.....	609,097	811,227	Tobacco and cigars.....	49,343	52,346
Capsules.....	14,529	28,580	Vegetables, in brine.....	18,086	14,896
Cacao and manufactures:			Wax, paraffin.....		5,920
Beans.....	1,739	16,858	Wood:		
Butter.....	124,596	76,828	Ebony.....	3,833	4,734
Cocoa.....		6,363	Teak.....	8,030	8,821
Powder.....	1,512	2,679	Walnut.....	43,810	17,736
Cheese.....	61,828	65,242	All other articles.....	223,733	112,647
Coffee.....	5,282	4,258	Total.....	6,937,233	9,024,309
Copper ashes.....		5,610			
Cresote salts.....		4,392	FLUSHING.		
Earthenware and tiles.....	83,812	65,541	Beans.....	10,332	9,381
Electric lamps.....	15,447	94,973	Glass.....	26,665	3,167
Ferromanganese.....	39,109		Seeds.....	32,673	32,360
Fertilizer.....	55,894	104,165	All other articles.....	338	360
Flax.....	71,440	88,878	Total.....	70,948	45,268
Gin.....	281,245	14,449			
Glass and crystal ware.....	34,621	42,478	LUXEMBURG.		
Glycerin.....	147,064	206,202	Earthenware.....	12,575	8,331
Gold and silver ware.....	14,437	4,969	Fertilizer.....	15,643	1,048
Hides and skins.....	1,284,877	1,963,492	Gloves.....	75,827	54,932
Machinery.....	47,838	64,992	Skis for gloves.....	5,482	11,912
Madder.....	3,570	3,084	All other articles.....	3,655	2,342
Magnesite.....	11,529	24,712	Total.....	113,182	78,565
Matches.....	2,775	4,092			
Milk powder.....		6,558	SCHVENINGEN.		
Mother-of-pearl.....	25,618	22,355	Beans.....	3,500	4,892
Oils:			Books.....	11,928	17,796
Cananga.....	1,157	3,908	Cakes.....	4,958	3,113
Citronella.....	3,284	2,276	Candles.....	4,099	2,052
Cottonseed.....	64,192		Cheese.....	16,959	15,812
Fusel.....		9,409	Chemicals:		
Linseed.....	797,424	651,705	Acetic acid.....	14,014	
Rapeseed.....		9,868	Formic acid.....		11,351
Stand.....	8,924	18,730	Magnesite, calcined.....	4,618	8,888
Oleostearin.....	259,687	32,781	Ebony.....		6,210
Ore, manganese.....	944	7,075	Fish:		
Paintings.....	106,411	28,130	Herring, pickled.....	1,209,517	1,114,594
Paints.....	7,583	9,471	Mackerel, pickled.....	33,235	49,204
Paper.....	42,069	62,962	Gin.....	114,039	6,025
Paper stock.....	135,687	153,358	Glycerin.....	66,705	28,287
Peanuts.....		13,608	Gum damar.....		5,318
Peat moss.....	47,485	41,645	Household goods.....	220	23,329
Plants and trees.....	462,267	458,349	Oil, arachide.....	267,449	167,086
Potato flour.....	280	20,141	Oil paintings.....	39,095	25,882
Potatoes.....	3,340	12,727	Peas.....	427	10,406
Prussiate of soda.....	2,390	21,150	Potatoes.....	2,390	10,000
Rice.....	483,618	417,837	Rope, old.....	66,294	62,136
Rubber:			Sardels.....	5,820	8,491
Crude.....	35,161	316,950	Varnish.....		5,312
Waste.....	75,302	16,178	Vegetables, preserved.....	3,397	2,925
Seeds:			All other articles.....	19,986	21,578
Caraway.....	44,782	77,193	Total.....	1,888,650	1,610,693
Mustard.....	13,686	20,184			
Poppy.....	12,369	25,330	Grand total.....	9,009,013	10,758,835
Rape.....	46,399	84,897			
Spices:					
Cassia vera.....	14,990	33,898			
Cinnamon bark.....	2,330	8,445			
Cloves.....	78,856	60,955			
Mace.....	13,800	35,258			
Nutmegs.....	31,270	82,949			
Pepper.....	91,885	211,914			

Cheese to the value of \$170,088 in 1910 and \$194,612 in 1911 made up the total exports from Rotterdam to Porto Rico. The exports declared from this port for the Philippines amounted to \$39,648 in 1910 and \$48,425 in 1911. The principal items in the latter year were: Cheese, \$17,948; earthenware, \$4,178; electric lamps, \$2,787; rubber tires, \$2,010; cedar wood, \$9,784; red Turkish yarn, \$4,706.

New Warehouse and Salesrooms.

A large office and warehouse building covering an area of 26,666 square feet was erected in 1911 by a prominent importing firm at Rotterdam which does a large business in American goods. It has arranged large, well-lighted showrooms for the American trade, where goods may be displayed, and has provided bonded stores to enable manufacturers to store their goods here for distribution to European points. Rotterdam, with its unique facilities for transporting merchandise to all of Europe by rail and water, is an excellent center for the storage of bonded goods.

Shipping and Shipbuilding.

The shipping and forwarding interests showed a decided gain in 1911, and Rotterdam maintained its position as second only to Hamburg among the seaports of continental Europe. The arrivals numbered 9,562 vessels, of 18,309,542 tons gross, as against 9,368 vessels, of 17,682,707 tons gross, in 1910. The harbor dues collected in 1911 amounted to \$1,021,200.

The shipyards, which make a specialty of building small vessels for river trade, were busy during the latter months of 1911, and orders for ocean vessels came to the larger establishments so fast that they could not all be filled. Early in March, 1912, there were 20 steamers on the stocks of the Rotterdam shipyards.

The two steamship lines carrying passengers to the United States carried 18,707 cabin and 30,105 steerage passengers in 1911. A new passenger steamer of 32,000 tons has been ordered in Ireland by the Holland-American Line.

The population of Rotterdam on December 31, 1911, was 436,015, an increase for the year of 9,127.

STIMULATION TO FARM PRODUCTION.

Secretary of Agriculture Wilson has announced plans to be instituted for farm-management study and work in the North, for which both Houses of Congress have made provision in the agricultural appropriation bill. This plan, on which the Secretary and Dr. B. T. Galloway, Chief of the Bureau of Plant Industry, have been working for several months, corresponds to the cooperative demonstration work in the South. The Federal Government, through its agents, who will act in cooperation with State and local inspectors, proposes to make a comprehensive study of the farms of the country, with a view especially of carrying to the farmer information which will show him why a certain branch of his industry is unprofitable, and how he can make it pay, or, if not, why he should drop that branch. "We will carry the agricultural school to the farmer," said Secretary Wilson. "Ordinarily, only one man in a large number can go to school to study farming. We must take the school to him."

CONSTRUCTION WORK ABROAD.**JAPAN.**

[From Consul General Thomas Sammons, Yokohama.]

Improvement of Yokohama Gas Works.

A \$600,000 loan has been negotiated for improving the municipal gas works at Yokohama. Considerable quantities of iron pipe are being used, and a further supply will be required.

Application for One Million Electric Lights at Tokyo.

The Japanese Government has rejected the application of the municipal authorities of Tokyo for permission to increase the capacity of the electric-light department of the city to approximately one million lights. The municipality of Tokyo is now engaged in the lighting business through the ownership of the electric street-railway lines. The Tokyo Asahi states that the reason for rejecting the application is that when the establishment of the Nippon Electric Light Co. came up for approval last year, the Government, after investigation, ascertained that there was ample room for the operations of three companies—the Tokyo Electric Light, the Nippon Electric Light, and the Electric Light Department of the Tokyo Railways (now the Electric Bureau of the Tokyo municipality)—and granted the Nippon Electric Light Co. the right to furnish electric light to the amount of 11,000 kilowatts. If the Government were now to sanction the new scheme of the Tokyo municipality for 17,000 kilowatts (or actually 20,000 kilowatts), despite the fact that there has been no particular increase in the demand for electric light in the city, the grant to the Nippon Electric Light Co. would become meaningless.

Fireproof Materials for Tokyo.

Owing to numerous devastating conflagrations, the municipality of Tokyo proposes to enforce regulations requiring fireproof buildings, the same to be constructed of stone, concrete, or brick. In connection with this movement, buildings containing inflammable materials are to be provided with water pipes having fusible heads, such as will be liquified under heat and thereby automatically release the water supply.

MANCHURIA.

[From Consul Albert W. Pontius, Dalny.]

Character of City Buildings.

Private capital invested in buildings in Dairen (Dalny) up to January 1, 1912, totaled \$5,724,000, according to the local Japanese civil administration. This includes 80 brick godowns completed and 32 under construction, the 5-story railway hotel, still building, and 1,369 flat buildings completed and 147 under construction. In brick construction the 1-story flat buildings predominate and were apparently erected at an average cost of \$1,570. The buildings most in favor are evidently those of 2-story construction, the average cost being \$4,200.

The cheapness of the frame structure places that style of building, however, in most common use, although the practice of erecting hundreds of these flimsy and unsightly structures is now beginning

to impress the contractors as being just the opposite from economical. The local frame structures do not in any way compare with the substantial wooden frame buildings in common use in the United States. They are constructed chiefly of lath and plaster, both interior and exterior, and are soon affected by the wind and rain.

Practically all of the residential buildings erected in recent years were designed and constructed by Japanese architects and contractors, and although the buildings are meant to be of foreign pattern, in many cases the impractical interior arrangement leaves much to be desired. Some of the houses have been erected without chimneys, and considering the zero temperature prevailing during the winter months, surprise must be expressed at this apparent oversight. The lack of chimneys or the impractical nature of those installed has the result of making scores of buildings most unsightly in appearance during the cold winter months, as stove pipes have to be stuck out of windows and elevated to a "safe" sky line.

With the exception of the defects mentioned the building operations in Dairen brought to completion are a credit to the many enterprising contractors who have shown great energy in their work of contributing to the construction of a model city.

MEXICO.

[From Consul Luther T. Ellsworth, Ciudad Porfirio Diaz, the name of which city has been officially changed to Piedras Negras.]

Railway Extension to the Rio Grande.

The Mexican National Railways have given the grading contract for their Allende Station to Las Vacas line to Señor Marcos Hernandez, manager of the Don Lorenzo Estate. At Las Vacas connection will be made with the St. Louis, Kansas City & Orient Railway, which is being extended to Del Rio, Tex., opposite Las Vacas. Señor Hernandez has started the work. He resides at San Carlos, Coahuila, Mexico, and may be addressed in English or Spanish. The chief engineer of this railway extension has established headquarters at Allende, Coahuila, and will lay the track as rapidly as the grade work is finished.

CANADA.

Huge Hydroelectric and Water Supply Enterprise.

It is announced from Toronto that the government of Saskatchewan has made a contract by which the Canadian Pacific, Canadian Northern, and Grand Trunk Pacific Railways will spend \$20,000,000 diverting the South Saskatchewan River to supply water to Regina, Moose Jaw, and Weyburn, and other cities, and also in developing 30,000 electrical horsepower. A commission has been appointed to prepare plans.

BRAZIL.

[From Consul Southard P. Warner, Bahia.]

City of Bahia to be Improved.

Elaborate plans for the improvement of Bahia have been drawn up by the municipal authorities here. A broad avenue is to be constructed through the lower, or business portion of the city, and several of the most important streets in the upper city are to be broadened and

improved generally. These improvements will necessitate the demolition of a very large number of old buildings which are to be replaced by more modern structures. The construction of these new buildings will mean a great increase in the importation of building materials and hardware of all sorts, but as there are several foreign firms located here which make a specialty of importing this class of material, whereas not a single American firm of this nature exists here, it is more than probable that the great majority of the forthcoming orders will be placed in Europe.

ARGENTINA-CHILE.

[From a report by the British Legation at Buenos Aires.]

Proposed Trans-Andine Railway from San Antonio to Valdivia.

The engineer who has been surveying the country between Port San Antonio (Argentina) and Valdivia (Chile) has reported favorably on the possibility of constructing a Trans-Andine railway connecting these ports. The Government railway under construction from San Antonio to Nahuel Huapi would be used for about 300 miles, 200 miles of which have already been completed, and the line would then proceed for about 60 miles up an easy valley where the Andes are much lower to cross than they are further north.

ITALY.

[From report of British consul at Syracuse.]

Harbor Works—Building Material.

Owing to the lack of sufficient wharves and harbor accommodation at Syracuse, and to the increasing traffic as a result of the annexation of Tripoli and Cyrenaica, the Italian Government has under consideration a project and estimates for the carrying out of extensive harbor improvements, and the construction of a new railway station, customhouse, and post office for sorting letters, etc., arriving at Syracuse from Tripoli. There are also projects for harbor improvements at the port of Augusta, and during the year 1911 a large area of land near the wharf was leveled to be utilized as a depot for coal.

NETHERLANDS.

[From Consul Frank W. Mahin, Amsterdam, Netherlands.]

Increased Dry-Dock Facilities at Amsterdam.

During the last two years the dry-dock facilities of Amsterdam's harbor have been materially increased to accommodate the greater number and growing size of the ships using this port. But even this enlargement is now found to be insufficient, and the Amsterdam Dry Dock Co. is accordingly planning further extensions. A fifth dry dock is to be added to the four now in use; and the Juliana Dock, only beginning service last year, is to be lengthened from 460 feet to 600 feet and broadened in proportion and have a berthing capacity for vessels of 16,000 tons instead of 12,000 as at present.

AUSTRIA.

[From Consul J. I. Brittain, Prague, Bohemia.]

Building Material for Prague.

Many of the bricks used in Prague are yet made by hand, both women and men working in the yards. Practically all the buildings are constructed of brick and plastered on the outside. The bricks are larger than those commonly used in the United States and not so well finished, not being used for facing the outside walls. The ordi-

nary building bricks sell at about \$8 per thousand. Many new buildings are being erected, which makes the brick business one of the best in the city. Large quantities of brick and stone are brought to Prague from points up the River Moldau, as labor is not so well paid in these more distant villages. [The names of the leading architects and the brick makers of Prague may be had from the Bureau of Manufactures at Washington.]

BRITISH INDUSTRIAL NOTES.

[From Consul Benjamin F. Chase, Leeds.]

Farthings to Reduce Cost of Living.

A local newspaper, in commenting on an experiment of considerable interest to students of the cost-of-living problem, whereby an attempt is being made to introduce the farthing (one-half cent in value) into general circulation, says:

Mr. Robert Armitage, M. P., managing director of the Farnley Iron Co. (Ltd.), has conceived the idea that if the farthing were more generally used the cost of living would be considerably reduced to the working classes. Briefly, his argument is this: People of the poorer classes buy their goods in small quantities. If an article is 19 cents a pound, they have to pay 10 cents for half a pound; consequently, they are overcharged to the extent of 1 cent on every two half-pounds they buy. In the same way 4 cents has to be paid for half an ounce of 7-cent tobacco, and 2 cents for a gill of milk when the price is 3 cents per pint. It is fairly clear, therefore, that if farthings were used there would be a considerable saving to the purchaser in the course of a year.

By way of experiment, Mr. Armitage has arranged that a portion of the wages of every man employed at the iron works shall be paid in farthings each week, in order to get the coins into circulation in the district.

Improper Use of Cloth Patterns.

The Yorkshire Post is authority for the statement that a circular addressed to the principal woolen merchants in Great Britain and on the Continent has been issued by the Fine Cloth Manufacturers' Association of Huddersfield, Leeds, Bradford, and Halifax, together with the Scottish Manufacturers' Association, setting forth that the interests of both merchants and manufacturers have suffered considerable loss from the misuse of patterns which have frequently been obtained by competitors and pattern dealers shortly after their production and before the pieces have been manufactured and delivered. The journal referred to states:

The associations are convinced that it is essential, in order to protect the makers and dealers in fine British cloths from this evil, that a trade custom should be universally acknowledged that all patterns sold or submitted to any merchant or tailor are manufacturers' and merchants' trade secrets until the goods are delivered to the merchant, and must be treated as such. On the best legal advice obtainable the associations consider that once a trade custom is established, it would be easier to prevent and punish the misuse of patterns.

The over-sea trade of New Castle, New South Wales, for the quarter ended March 31, 1912, according to Consul G. B. Killmaster, of that Australian port, amounted to \$3,744,196, compared with \$3,560,647 during the first three months of 1911. Over-sea imports aggregated \$1,102,641, against \$1,100,855 in 1911, and over-sea exports totaled \$2,641,555, in contrast to \$2,459,792 in the previous year. Coal formed nearly the whole of the past quarter's shipments, having a value of \$2,572,520, against \$2,033,395 in the first quarter of 1911.

FOREIGN TARIFFS.**ARGENTINA.**

[From Boletín Oficial, Argentina, Mar. 13, 1912.]

Regulations for Customs Storage.

When goods imported through the customhouses of Argentina remain more than four months in the customs storage they shall be subject to an extra charge of 50 per cent of the regular storage rates; after eight months this extra charge will be 100 per cent of the regular storage rates. The period for which goods may be entered in the customs storage is one year from the date of the entrance of the vessel on which they arrive; on special request presented before the end of the one-year period the limit for the customs storage of the goods may be extended for another year. Goods, the subject of dispute before the customs or judicial authorities, are not affected by the above provisions.

When the period for which the storage may be allowed has expired the customs will not only not be responsible for loss or damage of goods, but they will demand the payment of all charges that may be due on such goods, regardless of their condition at the time. At the expiration of the time for which customs storage is allowed, goods will be disposed of at public sale, and from the proceeds of the sale all charges that may be due on the goods will be deducted; any surplus that may remain will be at the order of the owners or consignees of the goods for a period of one year, at the end of which time it shall become forfeit to the treasury.

CHILE.

[From Consul Charles L. Latham, Punta Arenas.]

Consular Invoices for Shipments to Punta Arenas.

Care should be taken by exporters and shipping companies to provide all shipments to Punta Arenas, Chile, with formal Chilean consular invoices. This requirement is important because of the tariff law providing for customs duties upon certain classes of goods when introduced into Magallanes Territory and establishing a customhouse in this port.

Until April 13, 1912, the date upon which this law became effective, imports into Punta Arenas and Magallanes Territory were entirely free of customs duties.

CUBA.

[Gaceta Oficial, Cuba, Apr. 30, 1912.]

New Regulations for Explosives, Arms, and Ammunition.

By a decree of April 24, 1912, there were established new regulations for the manufacture, storage, transportation, importation, sale, and use of explosives, arms, and ammunition in Cuba. These regulations take effect 30 days from the date of publication. [A copy of the new regulations, in Spanish, is on file in the Bureau of Manufactures.]

JAMAICA.

[From Consul Nicholas R. Snyder, Kingston.]

Reduction of Customs Duties.

The rate of the customs duty for articles not specially provided for in the tariff of Jamaica has been reduced from 16½ per cent ad valorem

to 10 per cent ad valorem, the reduced rate to go into effect July 1, 1912. Among the principal articles affected by the reduction are dry goods, boots and shoes, hardware, and drugs.

[From Consul Julius D. Dreher, Port Antonio.]

Revenues and Tariff Reduction.

As the Jamaican revenues, which have exceeded the necessary expenditures for several years [for 1910 report see Daily Consular and Trade Reports, Jan. 10, 1912], increased to a little more than \$5,000,000 for the last fiscal year, and as the condition of the colony seems to assure the collection of fully as much, if not more, revenue in each succeeding year, the Government felt that the time had come to reduce the customs duties. It was estimated that after meeting all regular expenditures and setting aside \$500,000 (in round numbers) for the maintenance of main roads and bridges, and as much more for new roads, bridges, and schools, there would still remain in the colonial treasury a surplus of \$783,500 for the current fiscal year. The Government accordingly proposed to the Legislative Council that the customs duties be so reduced as to yield about \$400,000 less a year, and that this should be effected by reducing the duty on flour from \$1.94, which is an average of about 40 per cent ad valorem, to 97 cents a barrel; on rice from 73 cents, an average of about 30 per cent ad valorem, to 48 cents a hundred pounds; and on bread and biscuits from \$1.01, an average of about 25 per cent ad valorem, to 81 cents a hundred pounds, thus making an average duty equivalent to about 20 per cent ad valorem on these three important articles of food; and it was further recommended by the Government that the present ad valorem duty of 16½ per cent be reduced to 12½ per cent.

The Legislative Council of Jamaica, which is composed of the Governor, as presiding officer, 5 ex officio, 10 nominated, and 14 elected members (1 for each of the 14 parishes), discussed for two days the proposals for the reduction of the tariff. Under the constitution of the colony 9 elected members may defeat a strictly financial measure; in this case the elected members voted almost unanimously against the reduction of the duty on flour, rice, and biscuits (crackers). These members took the position that there was no popular demand for reducing the duties on these articles of food, which are not in general use throughout the island, and that such a reduction would result in lessening the attention paid by the natives to their crops of "ground provisions" (chiefly yams and potatoes), on which the people depend mostly for food. To show that they were in favor of tariff reduction these members then proceeded to vote to reduce the ad valorem duty from 16½ per cent to 10 per cent, instead of to 12½ per cent as recommended by the Government. This reduction is to take effect on July 1, 1912.

Principal Articles Affected.

The chief articles on which only 10 per cent ad valorem duty will be paid after July 1, 1912, are as follows: Automobiles and motor cars; brass and copper goods; books (not printed); brick; bicycles; canned meats, fish, fruits, and vegetables; carriages, wagons, etc.; chemical products; clocks and watches; clothing; cotton, linen, silk, woolen, and worsted goods; hosiery, haberdashery, millinery, etc.;

cottonseed and prepared food for animals; confectionery; cordage, twine, etc.; farinaceous foods; firearms and ammunition; fresh meats, fish, and vegetables; fruits, fresh, preserved, and dried; furniture, of wood or metal; galvanized-iron roofing; glass, china, and earthen ware; gold and silver plated and gilt ware; hardware and cutlery; hats, felt and straw; hides; hops; iron and steel bars and manufactures of iron and steel generally; jewelry; lamps and lanterns; leather and leather goods, saddlery, harness, etc.; lime; medicines, drugs, etc.; musical instruments; molasses; paints and colors; perfumery; pickles and condiments; pictures; printing presses, type, etc.; pumps; rubber goods; scientific and surgical apparatus; shoes, boots, etc.; steam engines (not for agricultural purposes); tallow and animal greases; tin and zinc plates and sheets; turpentine; umbrellas; wall papering; writing paper, stationery, etc.; and wire.

While it is to be regretted that the Legislative Council failed to reduce the high duty on flour, it seems almost certain that the large reduction in the ad valorem rate of duty on so many important articles will be conducive to the increase of American trade with Jamaica. With Jamaica the United States has been doing an increasing import and export business for years. The official statistics for 1910 (the latest available) show that for that year the United States furnished 45 per cent of the total imports into Jamaica and received 54 per cent of the total exports from the island. With such intimate business relations with the States it is not probable that this colony will seriously consider the question of entering into a reciprocal trade agreement with Canada. Jamaica was not represented at the recent trade conference at Ottawa, and the question of reciprocity with Canada did not enter into the discussion of the proposals to reduce the customs duty in the session of the Legislative Council of Jamaica just closed.

RUSSIA.

[From Consul General John H. Snodgrass, Moscow.]

Government Assistance for Agricultural Machinery Industry.

The finance committee of the Imperial Council of Russia, after consideration of the projects for the change in some of the tariff rates on agricultural machinery and implements passed by the Duma, adopted the following resolutions: "The proposal of the finance committee of the Duma regarding the free importation of lathes for the equipment of works for the manufacture of the kind of agricultural machinery which may be imported free of duty is accepted; the proposal that spare parts for agricultural machinery should be admitted at reduced rates only when imported together with the machinery, and not when imported separately, is accepted."

The last question under discussion related to encouraging the manufacture of agricultural machinery in Russia by means of bounties. The committee decided to establish the following bounties: For the construction of traction engines, 1.25 rubles per pood (\$1.78 per 100 pounds); for the construction of complicated steam-driven thrashing machines, harvesting machinery, and binders, a bounty of 1 ruble per pood (\$1.43 per 100 pounds). [See Daily Consular and Trade Reports for Apr. 23, 1912.]

SALVADOR.

[From Diario Oficial, Salvador, Apr. 29, 1912.]

Extension of Surtax.

The legislature of Salvador has approved in part the Executive decree of September 19, 1911, by which the surtax of 20 per cent which had been previously created was reduced to 14 per cent. A feature of the Executive decree of September 19, 1911, was that the surtax was declared not to apply to flour and to materials for the manufacture of soap and candles. This exception the legislature has now done away with, providing that "this surtax shall be made to extend to those articles to which it was not formerly applicable." [See Foreign Tariff Notes, No. 4, p. 111.]

SWEDEN.**Reduction of Duty on Pork.**

American Minister Charles H. Graves, at Stockholm, has reported that the Swedish Parliament has reduced the tariff on cured pork of all classes 40 per cent, thus making the present rate 4.8 cents per kilo, or 2.2 cents per pound. The former rate was 8.04 cents per kilo, or 3.65 cents per pound.

WHAT PARIS PAYS FOR PUBLIC AMUSEMENTS.

[From Consul General Frank H. Mason, Paris, France.]

There are in Paris four theaters (the Comédie Française, Odéon, the Opéra, and Opéra Comique) which receive subventions from the Government, and 40 regular theaters, among which are included the Châtelet, Gymnase, Gaité, and Palais Royal, which receive no subvention. There are besides 12 large cinematograph theaters, 38 café concerts, 8 music halls, 10 skating rinks, velodromes, and circuses, among which are included the Magic City and Luna Park, both originally American enterprises; 6 permanent balls or dancing places, including the Bal Tabarin, Bullier, and Moulin Rouge; and finally 3 classical concerts, viz, the Concert Lamoureux, Colonne, and the Conservatoire; in all 121 regular places of amusement.

From the report of the municipal administration for 1911 it appears that the total receipts collected during that year by these various groups of theaters, etc., were as follows: The 4 subventioned theaters, \$1,839,438; 40 theaters of the Gaité class, \$4,538,659; cinematographs, \$541,097; museums and expositions, \$123,361; café concerts, \$1,330,752; music halls, \$1,366,257; skating rinks, circuses, etc., \$840,287; balls, \$189,714; artistic concerts, \$114,373; various other concerts, \$457,221; total, \$11,341,159.

For the support of the poor (*droits des pauvres*), the municipality collects a uniform tax of 10 per cent of the gross receipts of regular theaters and daily concerts, 5 per cent of the receipts from casual concerts given by artists or musical associations, and 25 per cent of the receipts of balls, races, and certain other amusements. The total revenue thus derived for the poor fund in 1911 was \$1,225,013.

The steady growth of Paris and the devotion of its people and the constant throng of foreign visitors to theatrical and musical entertainments are shown by the fact that the receipts of 1911 from these sources exceeded those of any previous year, not excepting even the years 1878, 1889, and 1900, when international expositions of world wide interest were held in Paris.

TRADE OF CANARY ISLANDS.

[By Consul W. W. Kitchen, Teneriffe.]

The year 1911 was a notable one in the Canary Islands because of the number of improvements in various lines. Work on the mole, or Government breakwater, was continued, 80 meters left over from 1910 being completed and 32 additional meters being built. This structure, begun soon after the arrival of the Spaniards in the fifteenth century, has been since then the greatest single source of expense to the Government and the municipality because of the frequent damage caused by storms. Until the present century it was a comparatively small affair. It has been gradually extended, however, and when completed will have a length of 2 miles and form a closed basin for the harboring of about 50 of the deepest-draft vessels. About half of this length has already been completed. The work requires a considerable degree of engineering skill, the mole being built of huge cement blocks, with a 12-foot edge and a beveled incline to the sea.

Cable Services of Canaries.

The past year saw an improvement in the service of the German-South American Cable Co., partly perhaps because of the completion of the new wireless company. The various cables from the Canary Islands have been laid since 1884. In that year the Spanish National Submarine Cable Telegraph Co. obtained a 10-year concession from the Spanish Government to lay the first island cables between Cadiz and Teneriffe (860 miles), Teneriffe and Las Palmas (57 miles), Teneriffe and La Palma (69 miles), and Las Palmas and Arecife, Lanzarote (164 miles). Upon the expiration of this concession the Spanish Government took the lines over, and has since worked them through a Government staff. In 1908 new cables between all these points were laid to replace the old lines. In 1885 an English company laid a cable from Teneriffe to St. Louis, Senegal (896 miles), under a 15-year concession from the Spanish and French Governments in agreement. Upon the expiration of this concession the company dissolved, after previously handing over the cables to the French Government, which subsequently transferred its holdings to the South American Cable Co. (Ltd.), to be used as an extension to its regular system from Pernambuco to Dakar. The St. Louis station thereupon was closed and the terminus of the old Teneriffe line moved to Dakar. Messages for Europe and North America by this cable go via the Dakar-Brest cable now.

In 1909 the German-South American Telegraph Co. laid a cable under a 50-year contract with the Spanish Government, assisted by liberal German governmental support, between Teneriffe and Emden, and in 1910 another cable between Teneriffe and Monrovia, Liberia. The latter has since been extended from Monrovia to Pernambuco.

The rates per word to Europe or North America by the German-South American Co. and by the Government cable are practically the same.

New Wireless Company—Road Improvements.

The Marconi Wireless Co. has completed and put into operation its installation, after a considerable delay in fulfilling the stipulations of the Spanish Government. While this company will compete with the cable company, there is no anticipation of war between them.

Where similar service can be performed by each the rates are similar. The four towers are each 185 feet high.

Considerable money was spent last year in road improvements, but their condition still leaves much to be desired. A road from Teneriffe to Laguna is in first-class repair and is being improved still further and extended to Buena Vista. A branch of this road runs to the towns of Guimar and Tasnia, in the southern end of the island, and will probably be carried around the island. The best road on the island runs from Laguna to Tegueste and Tejina, 5 and 9 miles, respectively, connecting with the road from Tejina to Tacaronte. There is also a fair road, built at enormous expense because of the blasting necessary, between Teneriffe and San Andres, a distance of about 6 miles. If the proposed railroad around the island should become a reality, it would utilize a fair proportion of the roads mentioned.

Tree Planting—Building Boom.

In the last year or two 8,000 trees have been planted in this vicinity, at a total cost averaging 50 centesimos (9 cents) each. A great many of these were planted at a cost of about 1 cent each, while about 100 cost as much as \$30 each, being planted in holes 10 feet deep and 5 feet in diameter blasted out of the solid volcanic rock.

There has been a considerable boom in building in this city, both in public and private structures, the most important of the former being the combined museum and art school. This is of stone, two stories in height, and cost \$100,000. About 100 modern, sanitary residences have been built and are in great demand and a boulevard was begun in 1911, along which several trees were planted. The first horse-drawn street sprinkler recently made its appearance here, having been imported from England.

The discovery of water in the hills of Las Mercedes at a height of about 2,500 feet made possible the establishment of a pressure system. The water is brought to large reservoirs outside the city and distributed through meters at a very reasonable cost.

Public-Service Corporations.

The local telephone company, which is Swedish, is considering the installation of a new and modern system. The present line runs from Teneriffe to Laguna and Tacaronte, with about 300 subscribers on the books in Teneriffe and 100 in Laguna.

Transportation is afforded locally by a single tram line and by old-fashioned cab, the rates being very reasonable, though the service is slow. There has recently been inaugurated a public automobile service, which at the low rates charged is so popular that the number of cars is not equal to the demand. The tram company was recently affiliated under the name of Compañía Electrica Industrial de Teneriffe, with the electric-light company, which a short time ago extended its service to Laguna and now supplies the light for both cities from a greatly enlarged and modern plant, completed in 1911. Electricity is used almost exclusively for lighting except by the poorer people, though the wealthier people living in the country houses have their own acetylene-gas machines.

Conditions in Import and Export Trade.

No exact figures on the total value of the foreign trade of the Canaries are obtainable, but the estimated 1910 total of about

\$20,000,000 was not materially increased in 1911. The exports exceeded the imports by about 15 per cent, Great Britain taking about 85 per cent of them, Germany, France, and Spain together 10 per cent, and the United States, Porto Rico, Cuba, and Italy the remainder. Great Britain also furnishes 80 to 85 per cent of the imports, which consist largely of manufactured articles and food-stuffs. Increases were noted last year in hardware, glassware, gasoline, petroleum, and tobacco leaf, but beer and lumber have fallen off. The proportion of the trade in these two articles enjoyed by the United States has declined largely, perhaps because of the better shipping facilities of Germany and Norway.

The principal imports into the port of Tenerife and the principal countries from which they came were as follows:

Articles.	Germany.	Great Britain.	United States.	Total, 1911.	Total, 1910.
Alcohol..... gallons..	37,662	783	.....	110,551	76,312
Beer..... do.....	88,753	31,738	.....	128,323	111,803
Biscuits and confectionery..... tons..	22	322	.....	494	151
Boots and shoes..... do.....	.....	3	.....	22	.....
Canned goods..... do.....	3	44	.....	128	95
Cement and lime..... do.....	412	814	.....	3,988	3,433
Fertilizers..... do.....	455	4,345	.....	5,483	3,884
Flour..... do.....	2	5,264	.....	5,356	3,702
Gasoline..... gallons..	5,847	281	20,500	28,532	.....
Glass..... tons.....	34	19	2	172	.....
Hardware..... do.....	275	275	1	945	713
Iron and steel manufactures..... do.....	111	317	.....	786	1,147
Leather..... do.....	1	1	.....	111	107
Liquors..... gallons..	723	2,686	.....	11,077	6,469
Malze..... tons.....	94	4,618	.....	6,096	7,116
Oil..... gallons..	1,424	6,738	.....	133,578	143,967
Paper..... tons.....	109	174	.....	806	789
Petroleum..... gallons..	279	4,894	108,000	113,173	107,642
Rice..... tons.....	9	420	.....	707	715
Soap..... do.....	12	830	.....	847	901
Sugar..... do.....	561	94	.....	661	599
Textiles..... do.....	78	715	2	1,203	720
Tobacco..... do.....	97	6	233	396	316
Wheat..... do.....	68	3,334	.....	4,536	4,211
Wine..... gallons..	757	2,022	.....	207,478	21,558
Wood..... tons.....	145	111	1,359	12,324	7,189

This table does not include coal, which is imported in large quantities for coaling the vessels calling here.

The principal export of the islands is bananas. The following table shows the amounts of bananas, tomatoes, and potatoes exported in 1910 and 1911:

Articles.	1910		1911	
	Quantity.	Value.	Quantity.	Value.
Bananas.....crates..	2,700,352	\$3,780,492	2,648,378	\$3,972,567
Tomatoes.....bundles..	1,013,806	2,027,612	991,047	1,982,094
Potatoes.....boxes..	384,703	336,615	506,032	454,278

Trade with United States and Porto Rico.

Most of the imports from the United States, even since the establishment of direct steamship service, come by way of Liverpool or Hamburg. For this reason there is a greater import trade in American goods than is apparent on the surface. The variety is surprisingly large, ranging from very minor articles to agricultural machinery. American articles for which a certain market exists here include flour,

soap and perfume, sugar, automobiles, stationary engines, confectionery, biscuits and crackers, boots and shoes, furniture, corsets, haberdashery, hardware, plumbing materials, cash registers, stationery, and patented novelties. This consulate desires to obtain a good supply of literature and catalogues (preferably printed in Spanish) in all these lines, and samples could also in many cases be put to good use.

Declared exports to the United States and Porto Rico from Teneriffe in 1910 and 1911 were as follows:

Articles.	1910		1911	
	Pounds.	Value.	Pounds.	Value.
UNITED STATES.				
Almonds.....				\$1,110
Cochineal.....	16,999	\$4,668	16,577	2,813
Dollies.....		708		285
Drawn work.....		4,732		1,294
Embroidered linen.....		314		
Household goods.....		3,000		
Onion seed.....	36,471	35,994	32,506	30,733
Pumice stone.....	88,029	1,384	77,852	1,557
Total.....	141,499	50,800	127,160	37,812
PORTO RICO.				
Almonds.....			1,032	174
Garlic.....	3,300	102		
Onions.....	220,385	2,958	295,238	6,139
Onion seed.....	734	515	2,193	1,594
Potatoes.....	276,382	2,099	850,995	20,902
Umbrellas.....		570		1,560
Waterproofs.....		542		752
Total.....	500,801	6,786	1,149,458	31,123

From Las Palmas the declared exports to the United States consisted of almonds \$881, and cochineal \$23,672, with \$344 worth of returned American goods. To Porto Rico the declared exports amounted to \$30,769, as compared with \$15,009 in 1910, and were made up of garlic, \$348; onions, \$19,118; potatoes, \$6,489; stone fillers, \$88; and umbrellas, \$4,725.

Coaling Ships Most Important Industry—Shipping Figures.

The industry connected with shipping is by far the most important on the islands. At the two principal seaports, Teneriffe and Las Palmas, thousands of steamers and sailing vessels, with tonnage running into the millions, call annually to discharge and load cargo, and with the completion of the Panama Canal this traffic is likely to increase immediately.

Las Palmas has six and Teneriffe four coaling firms, all English but one. Some of these have been represented here for the greater part of a century. The total sailing and steam vessels entering the ports of Teneriffe and Las Palmas in 1910 and 1911 were as follows:

Ports.	1910		1911	
	Number.	Tonnage.	Number.	Tonnage.
Las Palmas.....	6,170	9,230,974	6,460	13,401,502
Teneriffe.....	3,681	6,424,046	3,790	7,127,487
Total.....	9,851	15,655,020	10,250	20,528,989

These figures indicate that Teneriffe, the capital and social center, is not the most important port commercially. Although there is a fine harbor there, which does not have to be dredged like the one at Las Palmas, it is not so well protected against the sea, and the mole has to be continually repaired. The nationality of the ships entering the port of Teneriffe in 1911 was as follows:

Nationality.	Number.	Tonnage.	Nationality.	Number.	Tonnage.
Belgium.....	56	298,472	Spain.....	2,256	1,061,251
France.....	156	539,392	United States.....	1	1,000
Germany.....	410	1,760,897	Other countries.....	34	62,366
Great Britain.....	698	3,067,206			
Italy.....	39	132,038	Total.....	3,790	7,127,487
Norway.....	140	304,865			

The entire coal supply for these ships, except a small quantity brought from Germany, was imported from the Welsh mines.

Emigration Continues.

The past year saw a continuation of the heavy emigration of 1910, chiefly of the most sober and thrifty working class. This is due largely to low wages, aggravated in the island of Hiero last year by the drought. Although the Government at Madrid took measures to relieve the distress, it was unable to do so, and the exodus continued. From Teneriffe a total of 3,671 people emigrated, as compared with 3,474 in 1910, 3,081 going to Cuba and 399 to Argentina. The emigration of all the other islands is estimated to have been about the same as for Teneriffe alone.

MEXICAN BUSINESS NOTES.

[From the Daily Herald, Mexico City.]

Salt mining.—The Department of Fomento has entered into a contract with Rali Moreno giving him a concession to work the Navidad salt pits in Jalisco at a fixed rental.

Sinaloa's new capital.—It was officially stated at the Ministry of Gobernacion that the capital of the State of Sinaloa will be removed to-day (May 21) from Culiacan to Mazatlan.

Proposed Railway.—The Mexican Construction Co. has applied to the Department of Communications for a concession to construct a railway from Pachuca to Netzitlan, opening up a large district in northern Hidalgo, which now lacks means of rapid communication.

Wheat imports.—The British steamer *Cape Antibes* on May 20 arrived at Vera Cruz from Buenos Aires with a cargo of wheat, consisting of 89,000 bags, weighing 5,000 metric tons, which was discharged at the big stone pier direct into cars for transportation to the interior, the greater part being consigned to the flour mills in Puebla and other places in that vicinity. While the barley crop was very heavy this season in the Puebla district, the wheat harvest was almost a total failure.

WATER AND COAL AT PANAMA.

[Announcement of Isthmian Canal Commission.]

The Panama Railroad Co. has discontinued supplying water to vessels at Balboa, Colon, and Cristobal except in quantities that may be needed to reach the next port, and has notified the steamship companies that it may become necessary to stop supplying any water at all. The sale of coal, which was discontinued on account of the strike of bituminous workers, has been resumed.

HOP GROWING IN ITALY FOR BREWERIES.

[From Consul General James A. Smith, Genoa.]

Experiments in culture of hops have been conducted in Umbria, Italy, the past four years, and official reports state that the results are successful. This is important, since Italy is dependent on other countries for hops, importing in 1911 582,520 pounds, valued at \$211,700; in 1910, 326,260 pounds, valued at \$114,488; and in 1909 over 733,000 pounds, valued at \$283,220. The consumption of beer in Italy is said to be almost 26,000,000 gallons a year. Beer imports in 1911 were over 2,500,000 gallons.

Hops were planted on 1½ acres of alluvial soil, about 990 feet above sea level, at Orvieto, Umbria, near the Paglia River, in March, 1908. The outcome was so favorable that the experiments were continued and are now in the fifth year. The soil is fertile and adapted to hemp growing.

Studies had been made of hop cultivation in Belgium, Germany, and Austria, and previous experiments had been tried on a small scale in Italy at the Royal School of Agriculture at Brusegana and at Macerata, with about 100 samples of hops at each school. These results were also favorable.

Favorable Results Attained.

In the recent experiments at Orvieto hop plants were imported from Popperinge, Belgium, and the indigenous hop of Italy was also used and shown to be adaptable for beer. The first year's results were satisfactory, and the hops obtained were passed upon by experts as of commercial value. The Versuchsanstalt für Brauerei, of Berlin, pronounced the product satisfactory as to floral cones, aroma, and strength. The only unfavorable comment made by reports is that the hop scales were yellow and partly chestnut colored, while the best hops of commerce have a uniform pale-green color.

Particularly interesting to brewers in Italy are the results obtained from experiments with the indigenous hop. Tests were made with the Italian hop, both alone and crossed with the foreign variety. At a near-by brewery, Ditta Sanvici e Dell'Orso e Co., of Perugia, beer of the Pilsen type, brewed from indigenous hops crossed with foreign hops, resulted no less successfully than that prepared from foreign hops alone. Official reports to the Italian Minister of Agriculture state that it has been demonstrated that the indigenous hop can be used for beer and that it possesses intrinsic qualities more valuable than would be expected from its exterior appearance.

Experiments on Table-Lands.

On account of the difference in the climate of the hop-raising regions of other States in Europe from that of Orvieto, where the experiments were conducted, new crops of hops were planted in Italy, where the climate more nearly corresponds with that of other hop-raising regions. Thus, hops were grown on the table-land of Alfina, between Orvieto and the basin of the Bolsena, at a height of 1,650 feet above sea level. Here the ground is of a volcanic nature.

The distance between the rows of planted hops was reduced to 4.95 feet. Last year 200 cuttings of the hops of the Popperinge variety, which had thrived best at Orvieto, were planted at Alfina. In addition, hop cuttings from Prague were planted.

In spite of the unusually dry and warm season last year, the hops in Alfina thrived, especially those transplanted from Orvieto, which flowered unusually well, with uniform development and rich hop content. Hop growing on the Alfina table-land proved more successful than at Orvieto. Experiments are to be continued in both places this year.

At Orvieto the second and third year crops on the $1\frac{1}{2}$ acres netted 330 pounds, which were sold at \$86.85. The annual expense for the $1\frac{1}{2}$ acres is about \$135.10 or \$270.20 per hectare (2.47 acres). An average crop of 1,323 pounds is counted on, and at \$57.90 per quintal (220.46 pounds), it is figured that \$347.40 per hectare would be received from the sale of the product, so that a profit of \$77.20 would be made on a hectare. These figures represent the estimates for the fifth season of experiment.

The commission conducting the experiments, in summing up the experiments for the Minister of Agriculture, shows that the indigenous hop possesses qualities desired by the brewing industry of Italy. A gold medal has been conferred on the conductor of the experiments, Dr. Claudio Faino. It is now expected that experiments will be carried on with barley in an effort to supply malt for the Italian brewing industry.

EUROPEAN PEAT EXPERIMENTS.

[From Consul General Ernest L. Harris, Stockholm, Sweden.]

The problem of making Sweden independent of foreign coal has lately been receiving much attention, and experiments have been made with peat from bogs in northern Sweden. The peat was permitted to dry for one summer and then crushed to a fine powder. This is further dried in ovens containing several sections, the hottest section being on top. Heating requires 20 minutes, which makes the pulverized peat black and reduces the water content to 15 per cent. The ovens have a capacity of 25 tons daily, and are fired with the powder, which sells at the factory for \$2.27 per ton. It may also be used for boilers, and the State railway authorities are experimenting with it. Generally, however, the tests have not proved satisfactory from an economic and business point.

[The United States Bureau of Mines has issued a comprehensive 240-page book on "The Uses of Peat," which contains a large map showing the deposits of peat, etc. Copies may be had free on application to the Bureau of Mines, Washington, D. C.]

[From the London Times.]

British Invention for Utilization of Peat.

A new process for the utilization of peat, invented by F. H. Nixon, of London, consists of cutting the turf, after it has been air dried, into corrugated blocks, which are sprayed with petroleum so as to form firelighters. The blocks are subsequently given a coating of highly inflammable material which also strengthens them and prevents them from breaking easily. It is claimed that this process overcomes the obstacles associated hitherto with the combination of peat and petroleum which have been connected mainly with the employment of a briquetting machine that is not only difficult to work, but also expresses too much of the petroleum from the finished blocks. It is stated that the process enables the firelighters to be produced at a cost which has not been approached before. It is proposed also to employ the method for the production of fuel on a larger scale.

THE QUININE SITUATION.

"For the first time in more than three years domestic manufacturers of quinine salts have decided to advance their quotations from the seemingly stereotyped bulk basis of 14 cents per ounce," states the Oil, Paint, and Drug Reporter in its April 15 issue. In a later number this journal reviews the quinine situation as follows:

As a very firm undertone had been noted in the principal markets for cinchona bark since the auction held on March 28, no surprise was manifested at the news that bark sales from Java to Europe for April amounted to only 872,000 Dutch pounds [Dutch pound=1.09 pounds avoirdupois], or at the result of the bark auctions held May 2 when a price unit was reached more than 1 cent above that obtained at the previous sale. As this new unit showed an uplift of about 30 per cent, a corresponding advance in prices of the salts was immediately looked for.

This commensurate marking up of quotations on the salts carried the first hands' price on sulphate and bisulphate to a basis of 19½ cents in 100-ounce tins and raised that on 50-ounce tins to 20 cents. Quotations on other packages were similarly advanced to 20½ cents for 25-ounce tins, 21½ cents for 5-ounce tins, and 24½ cents for 1-ounce tins. Prices asked by the manufacturers for the alkaloids and minor salts were also raised proportionately, and in some instances domestic manufacturers are now offering 60-day contracts with protection against decline. As it is now evident that shipments of the bark from Java are being curtailed by a group of Dutch interests, still further advances in prices of the bark and salts are expected within the near future. As yet, however, quotations on cinchona sulphate and on cinchonidia sulphate have been left unchanged at 5 cents and 10 cents, respectively.

Java's Monthly Shipments to Europe.

Bark shipments from Java to Europe for April were 60,000 Dutch pounds more than those for March but 50,000 pounds under those for February. A basis for comparison is furnished by the following summary of monthly shipments:

Month.	Quantity, in Dutch pounds.			
	1909	1910	1911	1912
January.....	1,021,000	1,167,000	1,421,000	638,000
February.....	1,061,000	908,000	946,000	922,000
March.....	845,000	1,376,000	1,493,000	812,000
April.....	1,279,000	1,578,000	1,037,000	872,000
May.....	1,310,000	1,368,000	1,450,000	
June.....	992,000	2,348,000	1,516,000	
July.....	1,728,000	1,642,000	942,000	
August.....	1,420,000	1,849,000	1,728,000	
September.....	2,016,000	1,814,000	1,772,000	
October.....	1,360,000	1,064,000	1,534,000	
November.....	1,104,000	1,590,000	1,588,000	
December.....	1,345,000	1,357,000	1,188,000	

Some conception of the extent of the falling off in shipments from Java since the outset of 1912 is obtainable from the fact that shipments for the first four months of this year reached only 3,244,000 Dutch pounds, compared with 4,897,000 pounds for the corresponding period of 1911; 5,029,000 pounds in 1910; and 4,206,000 pounds in 1909.

At the London bark auctions held May 21 an advance of 1s. 8d. was recorded, the new unit being 7s. 8d. as compared with an average price of ½d. obtained at the previous sale and with the unit of 9s. 16d. which had been in force for more than two years prior to April 23.

DECREASING AMERICAN USE OF QUININE.

[Review by Bureau of Statistics, Department of Commerce and Labor.]

While quinine has long been a staple product of importation into this country, no marked growth in its imports has occurred in the last quarter of a century. In 1882, for example, over 5 million pounds of cinchona bark were imported; in 1892, 3½ million pounds; in 1902, 3¼ million pounds; and in 1912 the imports will probably be about 3¼ million pounds. In 1882 the imports of quinine and the various salts of

quinine amounted to 795,000 ounces; in 1884, 1½ million ounces; in 1892, 2½ million ounces; in 1902, 2½ million ounces; in 1906, 4½ million ounces; and in 1911, 3½ million ounces; while the rate of importation in the 9 months of the current fiscal year for which figures are at hand point to a total of about 3 million ounces in the 12 months ending with June.

The decrease in imports of quinine, despite the growth in population meantime, is ascribed to a variety of causes. The drainage of swampy districts, the better screening of homes, and the discovery of the relation between mosquitoes and fevers generally, have had a large part in reducing the prevalence of diseases for which quinine was and is still largely prescribed, while the development of the chemical industry has brought into use a number of coal tar and other preparations which share with quinine its popularity as a remedy of fevers and as a general tonic in professional and domestic practice.

Sources of Imports.

Cinchona, or Peruvian bark, is the generic name of a number of trees indigenous to Peru, Ecuador, and Bolivia, formerly the chief producers of that article. In the seventeenth century, however, it was first imported into Europe, where its value was quickly recognized and its use largely extended. Later the cinchona tree was transplanted from South America to Java, India, Ceylon, and certain other countries and its cultivation developed until Java and the British East Indies have become the world's chief producers of cinchona bark. With this development of its culture in the Orient has come a marked change in the source of the cinchona bark imported into the United States in the last 30 years. In 1882, when the annual imports exceeded 5 million pounds, nearly 3 million pounds were imported from Colombia, 1½ million pounds from England, about 600,000 pounds from South America, exclusive of Colombia, 106,000 pounds from Mexico, and smaller quantities from the British West Indies, the British East Indies, Central American States, France, Germany, and the Dutch West Indies. In more recent years, however, Netherlands is nominally the source of practically all the cinchona and other quinine-bearing barks imported. In the fiscal year 1911 the total imports of the class named were 3,826,000 pounds, of which 3,769,000 pounds were stated as from Netherlands, nearly 38,000 from Germany, and the remaining 19,000 pounds from England. Presumably a large part of the cinchona imported from Netherlands is originally from Java, whose exports of that article, chiefly to Netherlands, amounted to 18 million pounds in 1910.

Germany is the chief source of the quinia and the various salts extracted from cinchona bark imported into the United States. Of the 3,219,000 ounces imported in the fiscal year 1911, 1,958,000 ounces came from Germany, 946,000 ounces from Netherlands, 207,000 ounces from the Dutch East Indies, 83,000 ounces from England, and 25,000 ounces from France.

PREVENTING SHORT-PAID POSTAGE.

In connection with reports on short-paid postage, which have appeared from time to time in Daily Consular and Trade Reports, the Bureau of Manufactures recently received two letters, one from California, the other from Illinois, in which the same method of preventing short payment of postage is suggested. Each firm advises the use in foreign correspondence of envelopes differing in color from those employed for domestic mail. One firm writes:

All stenographers are trained from the time they begin work at our place to use for domestic mail United States light-colored stamped envelopes. All letters addressed to foreign countries must have a blue envelope without a postage stamp on it. Every evening the clerk who has charge of attaching stamps takes the letters in blue envelopes, and after first selecting those that go to foreign countries where 2 cents is sufficient, such as Mexico, Canada, Cuba, Great Britain, and Germany, he affixes 5-cent stamps to all other blue envelopes.

As has been stated in previous articles on this subject, the mere adoption of some system such as that suggested above will not suffice unless constant care is exercised. A system once adopted should be rigidly adhered to, for if those in charge of affixing stamps are allowed to become indifferent or careless complaints are sure to follow.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8919. Railway supplies and port improvements.**—An American minister in a foreign country reports that a local government official would like to receive communications from American manufacturers of railway supplies of all kinds. Considerable railway extensions and port enlargements are contemplated within the next few months. In the meantime the official in charge of these matters would like to hear directly from any firms that would be interested in having specifications and invitations to bid sent to them.
- No. 8920. Electric car lines.**—An American consul in a Latin American country has forwarded a report on a proposed concession for new electric car lines in his district. Copy of the complete report, containing detailed information regarding this contemplated road, will be sent to interested firms by the Bureau of Manufactures.
- No. 8921. Chairs and accessories for shoe-shining establishments.**—A business man in a European country informs an American consulate that he wishes to be placed in communication with American manufacturers of chairs and accessories used at public stands for cleaning and polishing shoes.
- No. 8922. Roll-top desks and sectional bookcases.**—A report from an American consul states that a resident of his district would like to correspond with American manufacturers of roll-top desks and sectional bookcases.
- No. 8923. Floating dock.**—Plans are being prepared by a foreign Government and bids will be invited within a few weeks for a floating dock. The official in charge of this matter would be glad to communicate with interested firms in the United States in regard to this matter. An American minister reports that the idea is to have a dock large enough to accommodate such vessels as visit Black Sea ports, made in three detachable parts, so that only one part need be used in case of small vessels.
- No. 8924. Cheap window shades.**—A merchant in a Mediterranean country informs an American consulate that he desires to be placed in communication with American dealers in cheap window shades. Correspondence may be in English, and prices should be quoted c. i. f. port of destination.
- No. 8925. Railway sleepers and other materials.**—A report has been received from an American consul relative to the importation of crossties and other railway materials into the country in which he is located. Correspondence from a firm that is interested in this proposition and which seems to be in close touch with the railway officials also accompanied the report, as well as specifications covering the material needed and other information that would be valuable to firms interested in the matter. All the foregoing papers, names of firms, etc., will be sent to interested firms in the United States by the Bureau of Manufactures.
- No. 8926. Tobacco and cigarette machinery.**—An American consular officer reports that an organization in a European country requests that American manufacturers of special machines for tobacco manufacturing, especially cigarette machinery and machinery for packing cigarettes and cut smoking tobacco, submit catalogues, price lists, and other particulars.
- No. 8927. Electric transporters.**—The American consul at Montevideo, Uruguay, reports that tenders have been called for furnishing and erecting 24 electric transporters, to be used at the port of Montevideo. Bids will be received until July 13, 1912. Plans and specifications may be seen at the office of the Minister of Public Works; the cost of the plans is \$5.17.
- No. 8928. Water-power driven machinery for making various tools.**—An American consular officer in a European country reports that a steel-tool factory desires to be placed in communication with American manufacturers of machinery, to be driven by water power, for the manufacture of hatchets, shovels, hoes, hammers, etc. It is requested that persons interested write direct in German to the firm referred to.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 669. Generators and converters.**—Sealed proposals for turbine generators, condensers, synchronous converters (or motor generators), and voltage regulator will be received at the United States Engineer Office, New London, Conn., until June 15, 1912. Information on application to A. E. Waldron, Captain, Engineers.
- No. 670. Navy Department supplies.**—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until June 18, 1912, for the following supplies. Firms interested therein should make application to the Bureau of Supplies and Accounts, giving the schedule numbers desired: Schedule 4599, gondola cars, duplex steam air compressor, vertical feed-water heater, direct-current electric locomotive, centrifugal machines, hydraulic press for powder. Tenders are invited until June 25, 1912, for the following: Schedule 4613, guncotton press cloth, hydraulic-pressure gauges, steel rails, steel pieces; schedule 4608, American crash, curled hair, upper-deck fire hose, wash-deck hose, red, white, and black cotton thread, linen thread, cotton twine; schedule 4602, convertible steel plate or coast shell fans; schedule 4600, furnishing and installing steam return line; schedule 4614, Klinger gauge glasses, rolled naval brass, rod brass, soft sheet brass, composition pipe fittings, malleable-iron pipe fittings, seamless drawn copper pipe, brass gate valves; schedule 4609, bake-oven grates, ash oars, oak-tanned rigging leather; schedule 4615, tin-plate bunker lamps, cylinder brass oil syringes, brass bolts and nuts, steel bolts and nuts; schedule 4611, sounding navigational machines, illuminated dial peloruses; schedule 4598, paving approaches to new storehouse with vitrified brick; schedule 4617, new pattern safes, safes for use of mail clerks; schedule 4608, green sewing silk; schedule 4612, switch ties, white pine; schedule 4604, steel bolts and nuts, cards, hammers, pickaxes, steel screw clamps, twist drills, hickory handles, snap hooks with rings, calking irons for wood, hydraulic jacks, steel tape measures, bronze drawer pulls, machinists' hand taps, painters' gasoline torches, alligator wrenches, pipe wrenches, screw wrenches; schedule 4601, oak or laurel boat knees, Oregon pine, white pine, white plank spruce; schedule 4607, bronze plates, round bolt copper, medium spelter solder, medium galvanized bar steel, medium bar steel, medium round rivet steel, lead pipe; schedule 4610, pig lead, fire hydraulic, cast-iron pipe, steel pipe, iron gate valves; schedule 4606, medium galvanized steel angles, steel plates; schedule 4603, paint drier, sperm mineral oil, black asphaltum varnish; schedule 4616, lubricating mineral grease, sperm oil; schedule 4605, globe and angle valves.
- No. 671. Fabricated structural steel framing.**—The Mississippi River Commission, 1307 Liggett Building, St. Louis, Mo., will shortly invite bids for the fabricated steel framing for a shop building 70 feet by 160 feet, with truss roof. Specifications and blank form of proposal will be furnished on application.
- No. 672. Subsistence stores and other supplies.**—Sealed proposals will be received at the United States Marine Hospitals, Stapleton, N. Y., and Louisville, Ky., until June 10 and 12, respectively, for furnishing subsistence stores and other supplies required at the hospitals during the fiscal year ending June 30, 1913, in accordance with lists of articles and specifications, copies of which may be had on application to the surgeon in charge of each hospital.
- No. 673. Brush, piles, stone, and spalls.**—Sealed proposals will be received at the United States Engineer Office, customhouse, St. Louis, Mo., until June 15, 1912, for furnishing 50,000 cords of brush, 20,000 piles, 80,000 cubic yards of stone and 20,000 cubic yards of spalls. Information on application to Chas. L. Potter, Lieutenant Colonel, Engineers.
- No. 674. Reinforced concrete floor.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until June 29, 1912, for a reinforced concrete floor, balcony, stairs, railings, etc., at the United States Naval Magazine, Fort Lafayette, N. Y. Plans and specifications can be obtained on application to the bureau or to the Inspector of Ordnance, in charge naval magazines, New York district, Iona Island, N. Y.
- No. 675. Medical and hospital supplies.**—Sealed proposals for supplying medical and hospital supplies required by the Medical Department, United States Army, will be received at the Medical Supply Depot, 543 Greenwich Street, New York City, until June 24, 1912. Schedules of supplies, etc., can be obtained at the address referred to.

DEVELOPMENT WORK IN VENEZUELA.

[From Consul John A. Ray, Maracaibo.]

For the last few months the region back of Lake Maracaibo, consisting of the States of Tachira, Merida, Trujillo, and Zulia, has been suffering from a plague of grasshoppers. The situation has become so alarming that the government of the State of Zulia has decided to take measures to destroy the grasshoppers. Various methods are being tried in the hope of obtaining relief. The plan from which most is expected is one tried with success in some of the western States of the United States, viz, destroying the grasshoppers with poisoned grain.

As a result of this plague the corn crop of this section is practically a total failure. Corn is quoted on the market of Maracaibo at 48 bolivars a fanega—approximately \$2 a bushel. It seems probable that corn will have to be imported from the United States.

Sugar Mill Proposed—Electric Light Installations.

In spite of the distress caused by the loss of the corn crop, plans are under consideration for several enterprises of importance. The most extensive is the proposal to erect a sugar refinery or "central" at Bobures, on Lake Maracaibo, with offices in Maracaibo. The capital stock will be 800,000 bolivars (\$154,000), most of which has already been subscribed locally. The machinery will likely be purchased in the United States.

The towns in the Andes back of Maracaibo are showing considerable activity in installing electric-light plants. At present light plants are being erected in Tovar and Valera, and plans are being formulated for another at Betijoque. Merida, San Cristobal, and Rubio have electric lights, the only important town of the district without such equipment being Trujillo. All these plants are run by water power, and the machinery is of American make and installed by American engineers.

Street Car Lines, Savings Banks, and Road Making.

The street railways of Maracaibo seem to be entering upon a new period of development, after having undergone a severe crisis. One line—the Las Delicias line—has ceased operations and the track has been torn up. The Bella Vista line seemed to be about to suffer a similar fate. The creditors of the line have taken over the property, however, and decided to revive it. An order for new equipment has just been sent to the United States. The Bella Vista cars are run by steam power, while the other lines have only mule cars.

Hitherto Maracaibo has had no savings bank. The Sociedad Auxiliar de Artesanos has organized a savings bank for laboring people, modeled after the American dime savings banks. The bank has not yet opened for business, but the success of the project seems assured.

The Venezuelan Government is constructing a macadam road in the State of Tachira. It is thought that this road will aid greatly in the development of that region. The Minister of Public Works is now on a tour of inspection of the road. The machinery used in constructing the road is of English manufacture.

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ANNUAL MEETING OF BRITISH CHAMBERS OF COMMERCE.

[From Consul General John L. Griffiths, London.]

At the fifty-second annual meeting of the Association of Chambers of Commerce of the United Kingdom, held in London in March, many questions, bearing not only upon the trade and commerce of the British Empire but of the world at large, were discussed.

Satisfaction was expressed that the British Government "is taking steps to bring about conventions with foreign and colonial Governments in regard to the recognition of commercial arbitration awards," and the hope was signified that "such awards will be made enforceable in all countries entering into these conventions."

Protection of British Trade-Marks.

The following resolutions were unanimously adopted to protect British trade-marks:

Where instances occur outside the United Kingdom of goods being manufactured or sold or offered or advertised for sale with or under marks or descriptions of such a character as to injuriously affect the rights of a community or trade in the United Kingdom as distinguished from the rights of a private individual, the British Government ought in proper cases, and where legally possible, to take proceedings outside the United Kingdom for the repression of the evil, and further when offenses of a similar character are committed within the United Kingdom, the British Government ought also to take proceedings against the offending parties.

Whereas the interests of British manufacturers are seriously injured by the prevalent practice of marking goods of Continental origin with English names and phrases of a nature to give rise to the false supposition that they are English goods, and whereas the municipal law of France is inadequate to secure for British manufacturers the protection against this practice to which they are entitled under the Madrid convention of 1891; it is resolved that His Majesty's Government be invited to enter into negotiations with the French Government with a view to obtaining such protection for British marks in France; and that His Majesty's Government be requested to make, in any future treaties or arrangements, the protection of foreign marks in the United Kingdom conditional upon a reciprocal protection being extended to British marks, in the country where such foreign marks originate.

Substitution of Goods.

In the course of the discussion upon the foregoing resolutions, one of the speakers stated:

The question is a much wider one than probably the members realize, there being a huge substitution of goods on the markets of the world that were never made in England. Sheffield is a name peculiarly valuable as a community name, and in

investigations by the people of Sheffield they found many other towns in England also deeply affected. No chamber has been more active in following up the substitution of fraudulent foreign-made goods sold as English goods than the Paris Chamber, and the association owes a great debt of gratitude to that chamber for the work they have done, particularly in pointing out the substitution of needles not made in Red-ditch, but sold as English goods. In Vienna it is possible to find straw hats marked "London" that never came from Luton, and Belfast knew to its cost how many cotton goods went out with "Shamrocks" on them that were sold as best Irish linen. The evil is exceedingly widespread. For instance, they knew in Sheffield that files which were sold in northern Italy were nearly all of German manufacture. Those files, instead of having centimeters on them, were labeled in inches, and were described as "flat," "bastard," and "half round" in English words. That is an evil which is inflicting a grievous injury upon British commerce. It injures this country in more than one way, because it not only robs it of orders, but goods not intended to be sold under the name of the man who produces them are not usually of very high quality, and the kind of article gotten up for a fraud is generally a discredit to the people who are supposed to father it. Therefore they tend to a diversion of trade by the undermining of the reputation of English goods in the markets of the world.

The conference held last May in Washington did something to remove some of the difficulties. [The result of the proceedings appeared in *Daily Consular and Trade Reports* for Sept. 2, 1911.] That conference recognized, on behalf of all civilized countries, that the consumers' interests, as well as the producers' interests deserved protection, and the various delegates went back to their countries pledged to recommend to their various Governments that the law as to false marks of origin should be strengthened in those countries where it is deficient. The point has now been reached that the evil is recognized by the representatives of the various Governments, and that legislation is required. It is quite true that possibly not much can be done in many countries until that legislation is put into force, but if the British Government shows an active interest in the question by conducting prosecutions even in a deficient state of law, and uses the fact that defeat followed, as a strong diplomatic argument, as a reason for the various Governments to pass the legislation to which they were pledged at Washington, those prosecutions will be an effective missionary effort in promoting alterations of the law. So strongly does Sheffield feel in regard to the matter that a fund of £11,000 (\$53,531) has been subscribed by the manufacturers for no other purpose than prosecution for fraudulent use of the word "Sheffield" abroad, and in doing so they have given an earnest of their endeavor to stop this particular form of fraud.

The Trans-Atlantic Cable Question.

A resolution was introduced, but afterwards withdrawn:

That, having regard to the American control of all trans-Atlantic cables touching British territory, this association urges upon His Majesty's Government the necessity, on national and imperial grounds, for cooperation with the Governments of the Dominions—especially Canada—with a view to the establishment of an independent and strictly "all-British" trans-Atlantic cable and land line connecting with the imperial Pacific cable.

In the course of the discussion it was stated by the Parliamentary Secretary to the Postmaster General:

There is no monopoly in the cables as they now stand. There are two groups of cable companies at present, the Western Union group, which works with British companies, and the Commercial Cable group, which works with certain Continental companies. Those two groups have independent land communications carrying on their cable messages; they compete at present actively with one another for business, and there is no reason to suppose that those two groups will ever combine together for control or for raising of rates. But apart from the question of monopoly there is the very important question of control of cables, especially in times of emergency, whether through war or any other cause. At present there are 13 cables crossing the Atlantic, every one of which start on this side from British territory and land on the other side of the Atlantic on British territory. All except one goes direct from British territory on this side to British territory on the other side, the one exception being a cable which touches the Azores on the way. It is perfectly evident that, in case of emergency, the country which controls both ends of the cable controls the cables absolutely, and from that point of view those cables, although operated by private companies, are for practical purposes as completely in the control of this country as if they were actually owned by this country.

Calendar Reform.

It was the unanimous opinion of the conference that a fixed date for Easter should be established by international agreement and that the British Government should be requested "to appoint a committee to investigate and report on the three bills now before Parliament on calendar reform."

Railway Consolidation.

The recent railway amalgamations and agreements of the United Kingdom were considered, and it was moved and carried:

(1) That while this association is not adverse to the principle of railway amalgamations and agreements which result in the elimination of wasteful competition and unnecessary duplication, provided that proper safeguards and guaranties are inserted for the protection of the interests of the trading community, it views with grave apprehension the increasing restrictions, the withdrawal or limitation of reasonable facilities, and the growing tendency to arbitrary and unfair treatment of the trading community, which, it is alleged, have resulted from the private agreements and understandings already arrived at.

(2) That it is essential to the protection of the interests of the trading community that all amalgamations, agreements, and arrangements between two or more railway companies should be made illegal, unless approved by Parliament; and that no such amalgamations, agreements, or arrangements should be approved unless proper and adequate safeguards are inserted for the protection of the commercial community.

(3) That the president of the Board of Trade be requested to receive a deputation to urge upon him the necessity for immediate action in connection with the matters referred to in this resolution.

The Freight Problem.

It was moved and unanimously carried:

That the president of the (British Government) Board of Trade be urged to appoint a strong departmental committee, on which the trading community shall be adequately and effectively represented, with the widest possible terms of reference, to inquire into and report upon the many important questions that have from time to time been raised between railway companies on the one hand and the traders and the general public on the other.

That the president of the Board of Trade be also informed that no proposed solution of the railway question can be regarded as satisfactory which does not confer upon the Board of Trade similar powers with regard to classification, rates, charges, and conditions to those which were conferred upon the board by the railway and canal traffic act of 1888.

In reference to the detention of private owners' wagons (cars) by the railways it was moved and carried:

That the present regulations governing detention of traders' wagons ignore short-distance traffic and deny the trader the right to claim for unreasonable delay, and that this matter ought to be arranged upon a mileage basis, in the same way that railways remunerate themselves for use of their own wagons—for example: On distance up to 20 miles, 1 day; on distance over 20 and not exceeding 100 miles, 2 days; on distance over 100 and not exceeding 200 miles, 3 days; on distance over 200 miles, 4 days, excluding day of departure and arrival.

British Seamen for British Vessels.

Attention having been directed to the number of foreign sailors in the British merchant navy, it was moved and unanimously carried:

Considering that there exist no national schools for the efficient technical training of seamen and petty officers for the British mercantile marine, and considering the acknowledged decrease of the number of British seamen and petty officers and the large increase of foreign sailors manning the British mercantile marine, this association is of opinion that the decrease of British and increase of foreign sailors in our merchant navy constitutes a grave national danger, and calls on the Government to take speedy measures for remedying the same.

Sugar Convention Opposed.

It was moved and carried:

That this association welcomes the approach of the time when the sugar users of this country will have at their disposal the sugar supplies of the world untrammelled by the terms of the Sugar Convention of 1902, and earnestly requests His Majesty's Government not to entertain any proposals for the renewal of the convention.

That the executive be asked to place this expression of the opinion of the association before the Prime Minister.

The majority in favor of the resolution was so small, however, that the president said that while it had been carried "it could not be put into effect, as the majority was not sufficiently large."

A Department of Commerce Urged—Marking Merchandise.

It was the unanimous opinion of the British Chambers of Commerce:

That representations be made to the Prime Minister urging that effect be given to the proposal of the Government (as foreshadowed in the King's speech on the opening of Parliament in 1905) to introduce a bill for the establishment of a Ministry of Commerce, and the desirability of carrying out this necessary and long-delayed reform during the present session of Parliament.

It was moved and carried that a memorial should be addressed to the president of the Board of Trade urging him to recommend the Government to do what it could to secure the enactment of further legislation in reference to the marking of merchandise. It was stated that the purpose of the bill now pending in Parliament was that in future all goods which were manufactured in the British Empire and were imported into the United Kingdom should bear that description, and if they were not manufactured in the British Empire they must be described as "not British."

Alteration in Fiscal System—Daylight Bill.

It was unanimously carried that:

Having regard to the conflicting opinions of commercial men in this country on the desirability of an alteration in our fiscal system, it is advisable that the fullest light should be thrown on the subject, and that His Majesty's Government be urged to appoint the strongest possible royal commission to inquire into the whole question and thus lift the consideration of the question above party politics.

Also:

That in the opinion of this association the nominal exemption from income tax at present enjoyed by cooperative societies constitutes a serious injustice to those private traders with whom such societies enter into competition, and that steps be taken to bring them under assessment.

And lastly:

That this association approves of the proposed daylight saving bill, and, believing that the adoption of the principles therein embodied would be of incalculable benefit to the community generally, and especially to those engaged in commerce and industry, desires to express the hope that His Majesty's Government may give early attention to the measure, and that a recommendation to this effect be forwarded to the president of the Board of Trade.

German Mausoleum Work Abroad.

A Bavarian marble works has just erected in the Greek Catholic Cemetery near Cairo, Egypt, a beautiful mausoleum of red Assuan granite set off with polished blue-colored Bavarian syenite. The success of the German firm in this work had good results, for it soon received another important order—the erection of a mausoleum in Byzantine style in the Jewish graveyard in Cairo. This imposing structure is constructed of light silver-colored Bavarian granite.

INTERNATIONAL CONFERENCE ON RADIOTELEGRAPHY.

It is announced that an International Conference on Radiotelegraphy, at which all the countries of the world will be represented, except those having no seaboard, will assemble in London on June 4, and is expected to last for four weeks. There will be about 150 delegates. This is the third international conference that has taken place on the subject of wireless telegraphy, the first being a preliminary and the second a formal conference, held at Berlin in 1906. The third conference was to have been held last year, but was postponed until 1912. On this occasion the British Government will be the hosts and will entertain the delegates at an inaugural banquet. The object of the conference is to make regulations for wireless telegraphy as carried on by means of ship to shore messages, and its discussions will have no reference to long-distance wireless services nor to the scheme of British imperial wireless stations which is now being carried out. The existing regulations will be brought up to date in view of the great developments which have taken place since the last conference. The sittings of the conference will be held at the Institute of Electrical Engineers. The details of the program are not yet complete, as the various countries to be represented are submitting resolutions which have still to be embodied in the general program. The main object of this and the preceding conferences is to secure uniformity of working among all vessels licensed for wireless installations and the shore stations.

American Delegates to Conference.

A list of American delegates who will attend the London Radiotelegraphic Conference follows:

Navy Department.—Rear Admiral John R. Edwards, U. S. Navy, general inspector of machinery and naval vessels built on the Atlantic coast, chairman of the delegation; Lieut. Commander David W. Todd, U. S. Navy; Louis W. Austin, Ph. D., in charge radio experimentation, Navy Department.

War Department.—Maj. George G. Squier, Signal Corps, U. S. Army; Maj. Edgar Russell, Signal Corps, U. S. Army; Maj. Charles McK. Saltsman, Signal Corps, U. S. Army.

Department of Commerce and Labor.—Mr. John I. Waterbury, of New Jersey (who represented the Department of Commerce and Labor at the preliminary conference at Berlin in 1903; at the Berlin Conference of 1906, and secured the adoption of the supplementary agreement requiring interchange of wireless messages "without distinction of the wireless telegraph system" adopted by wireless stations on shipboard); Prof. Arthur Gordon Webster, professor of physics, Clark University, Worcester, Mass.; Mr. John Hays Hammond, jr., New York City; Mr. William D. Terrell, United States wireless ship inspector, Department of Commerce and Labor, New York, N. Y.

Department of Agriculture.—Prof. Willis L. Moore, Chief, United States Weather Bureau.

Treasury Department.—Constructor John Q. Walton, United States Revenue-Cutter Service.

The Russian coal mines and their main offices have been listed by Consul General John H. Snodgrass, of Moscow. The list will be loaned on application to the Bureau of Manufactures at Washington.

COMMERCIAL REVIEW OF BIRMINGHAM.

[By Consul Albert Halstead.]

The industrial activity of Birmingham during 1911 was the greatest experienced in a number of years. Although manufacturers in this English district are somewhat hampered by difficulties of access to the sea and comparatively high freight rates, there is no evidence of any falling off in their enterprise or activity, but instead a continued improvement of the methods of manufacture.

It is impossible to give any official statistics of the imports of American products into the Birmingham district, as this city is not a seaport; but, judging from the American goods seen in the shops and elsewhere here, and the increasing number of inquiries from potential British purchasers, there is apparently a gradual growth in the purchases from the United States. This trade growth seems also to be indicated by the inquiries from American manufacturers, which have probably doubled in the past five years, and which are more frequently followed by further letters showing that successful business has resulted from the investigations made.

Increasing Utilization of the Consular Service.

American manufacturers are showing a greater recognition of the real value and helpfulness of the consular service and of the genuine desire of American consuls to assist them in the introduction of their products. While a consul can not be informed of every opportunity in his district, he can usually give advice that is of material assistance. American trade methods also appear to be improving, and there is a better understanding of not only the differences between American customs and those of foreign countries but of the methods of obtaining foreign business. While the sale of goods f. o. b. American ports or c. i. f. British ports is still adhered to by the average American manufacturer, in a number of recent instances firms communicating with this consulate have shown a desire to make their terms and conditions correspond as nearly as possible to those prevailing in the United Kingdom.

Another feature, showing a different view of the duties of consular officers, is the growing tendency of American merchants to ask consuls for the names of manufacturers of products that they think will sell in the United States. British consular officers are not permitted to furnish the names of foreign manufacturers, and the supplying of such information, with the view to aiding imports from abroad, is not one of the duties of consular officers of the United States.

Effects of British Patents Act.

The British patents and designs act has been in operation for about four years, but it is impossible to give complete facts or many definite instances of its effect upon American manufacturers. This act requires foreign owners of inventions patented under the British law to manufacture or license the manufacture of their product within the United Kingdom within two years of the date of patent, on penalty of forfeiture. As a result of this act, a large American firm manufacturing a machine for which it has master patents is preparing for the organization of a company in the United Kingdom, to operate in the Birmingham district.

The effect of this act is also apparent from an inquiry recently received from an American who desired to dispose of the British patent rights to a certain tool. Had the owner of this patent not been apprehensive of losing his patent rights in England, he would have exported the product from the United States. As it is, the necessity of selling within a certain time will probably hamper him in obtaining a satisfactory price for his patent. In some instances, American owners of patents have licensed the manufacture of their products in this district.

A British firm with no American capital is now manufacturing in the United Kingdom a typical American product which had been introduced most successfully into England. This article was covered by a number of patents, the most important of which, it is understood, were abrogated because of failure to comply with the provisions of the patents act of 1907. The trade name of the American product is well known, however, and the American company is meeting the competition by advertising and excellent sales methods. Complaints have been made in the case of one article which is now being made in the United Kingdom, that the British product is not equal to the American.

Opportunities for American Goods—Fuel Economy.

There appear to be no strikingly new openings for the sale of American manufactures here. The coal strike in the early part of 1912 drew renewed attention to the use of fuel other than coal for supplying power for manufacturing. Many gas-engine users who have depended on the gas-supply authorities for their gas are disposed to adopt oil engines, while attention is being devoted to economy in the use of fuel, to the improvement of engines using crude or unrefined oil, and to other kinds of fuel or power that will make manufacturers less dependent upon coal. There might develop openings for American devices that will permit the use of substitutes for coal or greater economy in coal consumption. Alcohol can not be economically used here on account of the excise laws.

The preference of the British purchaser for articles of domestic origin, which has frequently been noted in the past, shows no abatement, but there is a steady market for many products made in the United States, provided the field is assiduously cultivated, supplies are always available, and British customs and prejudices, which include quick deliveries, are fully considered. The American manufacturer has an important field in Birmingham, because of the immense amount of manufacturing here, requiring machinery, raw materials, and semiraw materials in great quantities. This field is difficult, however, because practically everything that can be offered for sale from the United States is manufactured within the district.

Automobile Industry.

Probably half of the motor cars manufactured in the United Kingdom are made within a radius of 25 miles from Birmingham. This industry profited splendidly in 1911, and the demand necessitated the increasing of most of the larger factories. British cars showed an improvement in design and an average reduction in price.

Some British manufacturers have attempted to put on the market equally good cars at prices approaching those of the American makes,

but without equal success. There is now some talk of a combination of British manufacturers to make possible the production of good cars in larger quantities at prices similar to those of the American cars. British manufacturers and capital, when they see a public demand discovered by foreign competitors, generally manage to meet that competition with considerable success. Frequently the foreigner has done the missionary work and reaped the first harvest, and then found his goods partly supplanted by British products of a similar type. Automatic machinery, machine tools, typewriters, and cash registers, however, are striking exceptions to this rather general rule.

American automobiles of the highest grade, equal to the best British or other makes, have not, with perhaps two exceptions, been introduced into the British market, as the American demand consumes all the product of the American factories turning out this grade of cars, while British purchasers prefer the British or Continental make.

There is as yet no British demand for electric automobiles. A few of this class are obtainable in London, but they are not up-to-date, compared with the American types. There is probably but one British firm now making electric automobiles. Several firms turn out gasoline-electric vehicles, which are employed to a small extent on railways and promise to come into wider use. There is not and never has been any large demand for electric automobiles in England, as the gasoline car is preferred, and seems to meet all requirements.

Private companies and municipal authorities selling electricity have given little attention to increasing the demand for current by making low rates for charging batteries, establishing charging stations, and going after this potential business in a serious way. Before electric vehicles can be successfully introduced electricity for charging purposes must be made generally available. Because of their design and efficiency American electric automobiles may ultimately succeed in the United Kingdom, but British makers are then certain to produce similar types, with slight changes intended to make them more suitable for the British market.

Commercial Automobiles—Motor Cycles and Bicycles.

British makers of commercial motors last year had more than they could do to keep pace with the demand, and many new companies engaged in this line of manufacture. One of the principal passenger motor car makers in Birmingham is about to build commercial cars as well. American commercial motors have made little headway in the United Kingdom, though one company that uses its passenger chassis with a special body is steadily increasing its sales for light delivery purposes, while another light delivery wagon, such as is used by the department stores in the United States, is offered for sale. None of the latter are to be seen in Birmingham. British manufacturers of commercial vehicles and British technical papers assert that the heavy British commercial motor is superior to any made in the United States.

The increase of \$81,233 in the exports of motor cars and parts from Birmingham to the United States represented almost entirely shipments of sleeveless-valve engines and parts invented by an American

and adopted by one of the large automobile works in Coventry. The engines shipped are apparently used by several American manufacturers, and such shipments are not unlikely to decrease as their manufacture in the United States increases.

A majority of the motor cycles made in the United Kingdom are produced in the Birmingham district, and the industry developed remarkably during 1911. Many bicycle makers added the making of motor cycles as a branch, and the branch often became the most important part of the business. This industry is not hampered by competition, as the motor cycles made in the United Kingdom are superior to those made on the Continent. Only one American firm has had any success in selling motor cycles in this country, and it is doubtful, considering the character and excellence of the British motor cycles and the great productive capacity of the British firms now engaged in the trade, if other American firms could do as well here. The firm mentioned did a good business last year and captured some important racing prizes against serious British competition.

The local manufacture of bicycles continues to be important, and the makers in the domestic field had one of their best years in 1911.

Metallic Bedsteads—Leather and Gloves.

The manufacturers of metallic bedsteads 10 or 15 years ago were able to export their products in large quantities to the United States, but that market has been almost entirely lost through the development of bedstead manufacture at home, although bedstead parts are still exported in comparatively small quantities. The most striking feature of this trade in 1911 was the formation of a combination for the regulation of prices, which is believed to have ended that bitter competition which was proving so disastrous to the industry. A combination was formed some years ago, but this did not hold together, because it was impossible to penalize bedstead makers who broke the regulations. With deposits made by various members of the combination as earnest of good faith, it will become increasingly unprofitable for any manufacturer to violate the present agreement.

Despite high prices for raw and dressed leather business in the leather trade during 1911 was the largest for a number of years. There was a striking revival in the harness and saddlery industry from the decline which followed the introduction of the automobile. The fancy leather trades grew satisfactorily during the year. The demand for leather goods for the motor trade was a prominent feature. Dealers showed a tendency to buy their fancy leathers for automobiles from manufacturers in Walsall and Birmingham instead of in Vienna and other continental markets. South Africa was the largest market for harness and saddlery, with South America next.

If the Birmingham consular district were to be credited with all the gloves manufactured here and shipped to the United States, the total would be over \$1,000,000, as most of the English gloves of well-known makes sold in the United States are made near Birmingham, but sorted, packed, and declared in London.

Carpet and other Trades—Coal and Iron.

The carpet and upholstery trade, which centers at Kidderminster, experienced an excellent home and export demand during 1911.

Except for the usual complaint of the high price of raw material, the manufacturers had every cause for satisfaction. They complained that there was considerable dumping of American products in the markets which they sought, which simply meant that the competition of the American manufacturers was felt. There was little unemployment at Kidderminster.

The demand for British hardware in Germany, France, and other Continental markets is less than formerly. The best markets for this trade were found in India, Australia, and South Africa, followed by Brazil, New Zealand, and Canada. The shipments to Argentina, Germany, France, Chile, and the Netherlands showed decreases. The shipments of hardware from Birmingham to the United States showed a considerable increase.

The 1911 demand for the best grade of guns was the best of any year in the present century, largely on account of the fine summer and better trade conditions. Although often sold under London names, high-grade guns are made almost exclusively at Birmingham. The manufacture of military supplies is also an important industry here.

The coal-mining industry in the Midlands, South Staffordshire, Warwickshire, and Worcestershire experienced greater extremes and fluctuations than in either of the two preceding years, the trade of the opening months showing an improvement in volume and being rather promising, with spring bringing a reaction and extraordinary stagnation. Autumn and winter saw a complete rebound, which increased the demand until it was in excess of 1910 and 1909. Toward the end of the year industrial activity and the fear of a coal strike increased the desire to secure coal to provide against emergencies, which enabled quotations to be put on a more satisfactory basis, and caused mines to be exceptionally busy.

The Iron and Coal Trades Review calls the year the most trying in the history of the South Staffordshire iron industry. Strong foreign competition, weak quotations, falling prices, and stagnation of demand came early in the year when there had been hopes of activity; but the iron and steel industry became sufficiently prosperous during the latter part of the year to make it the best since 1907, the improvement beginning about the middle of July, when foreign competition became easier. The transport strike in August disorganized business, but the year ended with general activity and prices substantially advanced, with most manufacturers sold well into the first quarter of 1912.

Needles and Fishing Tackle—Jewelry and Silver.

Business in the needle and fishing-tackle industry in Redditch was greater than in any other recent year and prices were well maintained. German competition has become important to the English needle makers and its general effect has been to cause improvements in methods of production through the more extensive use of machinery. As a result, some small firms were absorbed by larger ones and several of the large ones were amalgamated, so Redditch has maintained its hold on the most important markets of the world. The Redditch needle that sells best is almost without exception of the higher and medium quality. Though cheaper needles are made,

they are hit rather keenly by the German makers. Business was good almost uninterruptedly throughout 1911. Australia and Continental markets took their usual quantity, while Canada and South Africa showed an increased demand. In fishing tackle there was a recovery after several unfavorable seasons, and the business was active through the year. The growth of the fishing-tackle industry during the year was said to be largely due to the increased demand from Russia and Canada.

In the manufacture of jewelry and silverware 1911 gave no particularly good results. Manufacturing jewelers had a normal business, but as there had been expectations of a particularly fine year, disappointment followed. The jewelers benefited to a certain degree from improved general conditions, but not in any sense in proportion to the increase of British prosperity. Silversmiths had a better year than the jewelers and in the cheaper grades business was considerably above the average. The manufacture of electroplate in Birmingham has increased for some years and grew considerably in 1911. Much attention has been paid by jewelers and silversmiths to colonial and foreign markets, with good results.

Glass Trade—Engineering and Machinery.

In the manufacture of the various kinds of glass which are specialties of Birmingham and vicinity, the year was one of the most active and profitable experienced in some time. Purchases were made steadily, the home trade was good, and foreign and colonial demand was much increased, while in plate glass the shipments were a little below the previous year. In flint glass bottles and other sorts of manufacture there were considerable increases in the exports, and home demands showed decided improvement.

In the engineering industry in the Birmingham district, prices were more remunerative and the volume of work was greater than in 1910. The expansion of manufacturing exceeded the increase in works capacity in a number of lines, so engine builders, machinists, and tool makers had additional work. Manufacturers of American machinery enjoyed their share of this additional demand. Wages were advanced in the engineering trades during the year by 1s. (24 cents) per week on time rates and 2½ per cent on piece work. Exports were greater than in the previous year.

Artificial Silk—Exports to the United States.

The largest item of export from the Birmingham consular district to the United States in 1911 was wood-pulp yarn, or artificial silk. This industry was established in Coventry only a few years ago, and its owners have since organized a company and constructed a factory in the United States. The increased exports to the United States, in spite of the production of the yarn there, indicate the extent of the increase in the use of artificial silk. With cotton or wool added to give it strength, this material is said to make as beautiful a textile as all silk, and is perhaps more durable. Artificial silk is being used for making silk bindings, silk braids, silk embroidery, and silk lace for ladies' costumes.

The value of the principal exports from this district to the United States, as invoiced at the Birmingham consulate and the agencies at

Redditch and Kidderminster, is shown in the following table, for 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
BIRMINGHAM.			BIRMINGHAM—continued.		
Animals.....	\$9,933	\$3,346	Steel and iron manufactures.....	\$174,596	\$170,770
Bicycle parts.....	67,955	76,038	Steel tubes.....	37,994	28,231
Books.....		45,318	Steel wire.....	35,926	8,783
Buttons.....	45,745	60,970	Watch and electrical jewels.....	72,718	72,312
Brass tubes.....		20,015	Wood-pulp yarn.....	630,267	708,064
Chemicals:			Varnish.....	31,675	35,241
Ammonia.....	190,479	207,586	Sundries.....	44,183	40,936
Carbonate of lime.....	19,104	16,265			
Oxide of iron.....	8,166	6,996	Total.....	3,449,125	3,442,917
Phosphorus.....	21,854	15,491			
Precipitated chalk.....	3,140	6,028	REDDITCH AGENCY.		
Red lead.....	8,770	12,590			
Salamoniac.....	35,189	11,311	Fishhooks and tackle.....	113,264	107,424
Soda ash.....	6,357	2,018	Needles and pins.....	360,874	358,625
Soda tartarata.....	5,900	6,773			
Sulphur verum.....	854	2,195	Total.....	474,138	466,049
Other.....	5,231	7,622			
Cotton goods.....	78,988	80,911	KIDDERMINSTER AGENCY.		
Earthenware.....	52,538	41,171			
Fancy goods and small ware.....	206,707	180,471	Anvils.....	29,548	27,445
Glass.....	101,822	67,922	Carpets.....	21,974	27,327
Gloves.....	158,313	157,710	Chains.....	5,225	3,907
Guns and parts.....	19,774	15,412	Earthenware.....	14,197	24,578
Gunpowder.....	51,272	46,970	Furniture, etc.....		2,067
Hardware.....	168,318	195,048	Glass.....	31,863	33,557
India-rubber goods.....	36,248	51,333	Gloves.....	16,092	11,932
Leather goods.....	284,557	308,639	Horsehair seating.....		2,221
Motor cars and parts.....	50,409	131,642	Jam.....	1,874	1,946
Needles.....	11,871	11,822	Leather goods.....	2,935	326
Pens.....	130,406	126,814	Pottery colors.....	1,613	1,583
Photographic films.....	78,098	55,001	Scythes.....	8,805	6,546
Pins.....	128,770	106,972	Skins.....	35,892	48,062
Platinum.....	50,793	22,420	Sod oil.....	13,139	9,543
Saddlery.....	83,896	66,006	Vinegar.....	5,135	11,450
Sauce.....	32,407	55,181	Wool.....	9,613	4,821
Scrap metal.....	31,565		All other articles.....	18,847	3,692
Shells.....	90,215	79,102			
Silver and plated ware.....	60,431	67,260	Total.....	216,752	221,333
Skins.....	91,691	9,259			

The exports from Birmingham to the American insular possessions during 1910 and 1911, respectively, were as follows: Philippine Islands, \$87,000 and \$76,264; Porto Rico, \$44,121 and \$31,118; Hawaii, \$1,787 and \$1,535.

The principal exports to the Philippine Islands in 1911 were: Hardware, \$11,848; metal sheathing, \$9,299; saddlery, \$10,528; iron and steel manufactures, \$6,729; and chocolate confectionery, \$6,202. To Porto Rico the principal exports were: Hardware, \$7,094; hoes, \$9,792; matches, \$7,354; and paint, \$3,205. The exports to Hawaii were made up of scientific instruments, valued at \$592, and screws, etc., at \$943.

PARCEL POST TO ECUADOR.

[From Vice Consul General Robert B. Jones, Guayaquil.]

Shipping by express to Ecuador is very expensive. It would always be better to ship small packages by parcel post. Coming by express, a full set of customhouse documents must be made out, and lighterage, wharfage, storage for one month in the customhouse, handling on wharf and in the customhouse must all be paid for, besides the commission for dispatching same, all of which is avoided when sent by mail. Spanish is the language used here, but most houses have correspondents who understand English.

NOTES FROM TAIWAN.

[From Consul Samuel C. Reat, Tamsui.]

Total Sugar Production.

The total sugar production in Formosa (or Taiwan) for the 1911-12 season is 300,676 tons. The amount of sugar manufactured by the modern centrifugal process was 216,019 tons, while improved and native mills produced 84,657 tons. Practically all the sugar will go to Japan. At the beginning of the season a small shipment was made to Canada. Next season it is possible that white sugar will be made by the Formosan factories, providing some agreement be reached between the sugar manufacturers and refiners in Japan. With the proposed erection of two new factories—one by the Minami Nippon Seito Kaisha (South Japan Sugar Co.), the other by the Teikoku Seito Kaisha (Imperial Sugar Co.)—the total number of modern-system factories in Taiwan will be 34.

The Mining Industry of Formosa.

The mining industry of Formosa for 1911 was as follows: Number of mines—gold, 9; gold-copper, 1; gold dust, 27; copper, 2; mercury, 1; coal, 270; petroleum, 39; sulphur, 16. Production—Gold, \$1,065,400; gold dust, \$48,882; silver, \$32,525; copper, \$264,513; coal, \$468,317; petroleum, \$3,243; sulphur, \$22,950.

Tea and Camphor Production—Ice Making.

The tea season opened May 1, and while it is early to make predictions, yet many are hazarded. The prevailing sentiment is that the production will be larger and prices higher. At any rate, the small amount now offered (Apr. 23) is a slight advance over the same grade at this time last year. Exporters will be increased this year by the addition of a Chicago concern, making six American firms represented.

The production of the Camphor Monopoly for last fiscal year, 1911-12, amounted as follows: Camphor, 6,264,416 pounds; camphor oil, 7,272,580 pounds. This is a slight increase.

With \$100,000 capital, the Taihoku Ice Manufacturing Co. is being established in Taihoku. Promoters are T. Matsumura, S. Sawai, and others. The ice works will be located in Daitotei, Taihoku, Formosa.

SHEEP INDUSTRY IN NEWFOUNDLAND.

[From Vice Consul Henry F. Bradshaw St. Johns, Apr. 17.]

While there are but 130,000 sheep in Newfoundland at present, a material increase in that number is expected the coming season. There are no large stock farms or ranches in the colony, the sheep being scattered over the island in small flocks owned chiefly by fishermen-farmers. The St. Johns Agricultural Society plans to go into the business of raising sheep and is making arrangements to import about 500 animals during the next three months. The St. Johns Golf Link Club has about 100 sheep on its grounds to keep the links in good condition. A woolen industry has recently been established at St. Johns.

[An article relating to the efforts of the Canadian Government to interest the eastern Provinces in sheep raising, and one giving the results of an experiment carried out on a small group of neighboring islands appeared in Daily Consular and Trade Reports dated, respectively, Mar. 16 and Apr. 18, 1911.]

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8929. Ventilating fans and parts.**—An American consular officer in the United Kingdom reports that a business firm in his district has inquired for the names of American makers of ventilating fans driven by hot-air motors, to be fitted with Bunsen burners suitable for petrol air gas. The following dimensions have been suggested, but may be varied, however, within reasonable limits: Diameter, 12 to 24 inches; height, 20 to 40 inches; number of revolutions, from 600 for small to approximately 300 for large sizes; the net cost prices delivered in the country not to exceed about \$10 for small fans. The firm also states in its communication that it would like to receive prices for parts to be used for repairs.
- No. 8930. Asbestos products.**—A Japanese firm, with a number of branch offices, informs an American consular officer that it desires to be put in touch with American manufacturers of asbestos products. This firm has done considerable export business in the Orient in this line with Canadian products, but these have not proved entirely satisfactory either in quality or price, and it now desires to communicate with manufacturers in the United States, preferably those in a position to ship their orders via Suez from the Atlantic seaboard. Bank references are furnished.
- No. 8931. Agencies for American firms.**—A report from an American consul states that a firm of commission agents in his district would like to secure agencies for any business houses in the United States caring to do an export business with the country in question.
- No. 8932. Shelf covers, table braizes, and stair and floor cloths.**—The Bureau of Manufactures is in receipt of a communication from a manufacturing firm in the United States stating that it has an inquiry from a customer in a European country for the names of manufacturers of shelf covers, table braizes, and stair and floor cloths. American firms in a position to supply these articles should communicate with the firm in question as soon as possible.
- No. 8933. Glass preserve jars.**—An American consular officer in Canada reports that a resident of his district, who furnishes bank references, desires to receive quotations from manufacturers of $\frac{3}{4}$ -pound glass jars, known as "honey jars," and 10-ounce jars of a similar sort.
- No. 8934. Machines for grating coconuts.**—A report from an American consulate in a Latin-American country states that a local exporter to the United States desires to obtain catalogues of machines for grating coconuts. Manufacturers of such machines should forward catalogues in the Spanish language, if possible.
- No. 8935. Duplicating machines.**—A business firm in South Africa, dealing in typewriters and supplies, informs an American consulate that it is anxious to get in touch with American manufacturers of a good duplicating machine suitable for that market. The firm states that it could do considerable business with such a machine. Correspondence with the firm in question should be in English.
- No. 8936. Flour.**—A report from an American consulate in the United Kingdom regarding the market for flour in his district was accompanied by a letter from a local firm requesting to be put in touch with certain American shippers of this article. This firm has for 35 years been the representative of some of the leading American milling concerns. It desires to have connections, however, with one of the best shippers in each of the principal flour exporting States, and the only State not represented, and for which there are many openings in that market, is Nebraska. Correspondence is desired with any miller desiring to do an export business. Business terms give the shippers absolute security, as the drafts against which shipments are made have to be paid before delivery of the goods can be obtained. As this firm already has the agency for many milling firms in the United States correspondence is desired with shippers in the State of Nebraska only.

- No. 8937. Iron and steel products.**—An American consul reports that the manager of certain foreign metal-working factories desires to enter into correspondence with American manufacturers of iron and steel products with a view to purchasing medium quality boiler sheets, angle and bar iron, etc. The present demands amount to 500 to 800 tons per annum, and up to the present purchases have been made from Germany and Belgium. It is preferable that correspondence should be in Russian.
- No. 8938. Sewing machines, motors, boats, automobiles, etc.**—A business firm in a Mediterranean country informs an American consulate that it is in the market for the following articles: Sewing machines, marine motors, motor boats, steel and wood, knocked down; electric automobiles, small coupé type, two seats; and motor cycles. The firm is well rated and has large showrooms on the principal thoroughfare of the city in which it is located. American firms not represented in that region will be given preference, as the firm does not care to do business with middlemen.
- No. 8939. Aluminum ware.**—Some of the large wholesale merchants in an Asiatic city have requested an American consul to secure the names of American manufacturers of aluminum ware. They are willing to accept an agency in this line. Aluminum ware companies should send illustrated catalogues and prices c. i. f. point of destination to the merchants referred to, also to the consulate submitting the inquiry. Prices should be given in English currency.
- No. 8940. Automobiles.**—A report from an American consular officer in a Latin-American country states that a resident of his district desires catalogues and prices for the purchase of two 16-passenger automobile trucks, to be delivered in November. These trucks are to be used for passenger service that is to be established between two cities upon the completion of a boulevard now under construction. Another resident of his district desires catalogues and prices for a five-passenger touring car, to be delivered at once. Price of this car should not exceed \$1,500.
- No. 8941. Lubricating oils and greases.**—An American consul in a European country reports that a business man in his district has requested to be placed in communication with first-class American manufacturers of lubricating oils and greases. The inquirer does not desire to act as agent, but wishes to make direct purchases against cash. Preference will be given to firms which are not represented in the country in which he is located, as he does not care to do business through middlemen. Samples and quotations c. i. f. city of destination should be furnished as early as convenient to the person in question.
- No. 8942. Sugar exchange.**—A sugar association in a foreign country is considering a proposition for the erection of a central sugar exchange, and with this object in view a committee of the association desires information regarding the best means of storing and stacking white sugars, character of building which should be erected, best means of conveying sugar by machinery from railway tracks to building, best means of stacking sugar by machinery, and any other points on which the committee should be informed.
- No. 8943. Paper.**—A business man in a South American country informs an American consular officer that he would like to receive quotations c. i. f. city in which he is located for paper similar to samples which can be obtained from the Bureau of Manufactures, or of even better quality paper. This stationery is intended for the use of the Department of Justice in the country in question. Correspondence should be in Spanish.
- No. 8944. Automobiles.**—A member of a trade organization in the United States, who resides in a large city of the West Indies, desires to purchase several passenger auto busses, each capable of carrying 14 or more persons, to replace coaches in a passenger service between two cities. Specifications and conditions of service can be obtained by addressing the organization in question.
- No. 8945. Plant for manufacture of turpentine.**—A business man in Central America informs an American association that he desires to install a complete plant for the manufacture of turpentine by the direct distillation of wood. Further particulars regarding this plant can be secured by communicating with the association referred to.

CALCUTTA-PACIFIC COAST FREIGHT CONFERENCE.

[From Consul General George E. Anderson, Hongkong, China.]

The trans-Pacific freight trade, particularly that portion concerned in exports from Calcutta to the United States, is agitated by the severance of the connection with the Calcutta-Pacific Coast Freight Conference of the Nippon Yusen Kaisha, the subsidized Japanese company which maintains a trans-Pacific service from Hongkong to Puget Sound ports and has maintained a service between Calcutta and Kobe via Hongkong. The severance is by formal action of the Conference lines. The action grows out of the establishment of this Japanese Calcutta-Kobe service which sought chiefly to reach the trade in gunny bags for the United States. Upon the Calcutta-Hongkong Conference lines refusing to admit the Japanese line as a member, the latter announced that unless the Conference would admit its Calcutta service the company would withdraw from the gunny agreement of the Calcutta-trans-Pacific service. It appears, however, that previous to this announcement the company signed forward contracts for gunny business to the United States for the season commencing July 1, 1912, contracts made before the Conference had agreed upon rates for such season; and for this course the Conference took the action noted.

The result is expected to be a long and hard freight rate war on trans-Pacific freights and particularly upon goods from India for the United States by way of the Pacific. The chief commodity affected is gunny sacks, but the trade also includes large quantities of jute, hessian cloth, tea, kapok, iron, bone meal, pepper and condiments, coir hawsers and yarn, indigo, linseed and linseed oil, hemp, ocher, rape cake, myrobolans, tumeric, and various other products. The freight on tea at present (Apr. 20) from Calcutta to the Pacific coast is \$12 per ton; that on all other commodities except prison jute \$8 gold per ton; and on prison jute \$6 per ton—all cubic-feet tons and all subject to a deferred rebate of \$2 per ton. Apparently Conference rates on other goods have not yet been fixed.

BRITISH CAPITALISTS TOUR CANADA.

[From the Monetary Times, Toronto.]

A committee, composed of members of the Halifax, Nova Scotia, city council and board of trade, recently met and mapped out a program of entertainment for the visiting British capitalists who will arrive there on June 10.

This large party of British men of affairs constitute the "Financial News" industrial and financial commission, and represent \$1,250,000,000 British capital. These ambassadors of British industry, bent on a mission fraught with great imperial possibilities, include leading men in almost every branch of British manufacture. Armor plating and ordnance making, electrical engineering, and almost all other branches of engineering, the motor-car industry, printing, flour milling, biscuit making, and general confectionery, all kinds of food preparations, with many another typical British industry, are represented by this delegation. British chambers of commerce and insurance offices are likewise to the fore. These captains of industry who, on a tour extending over two months, are giving their time with the serious purpose in view of seeing how far each can contribute to the building up of Canadian industry.

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INCREASED CANADIAN COMMERCE.

[By Consul General John G. Foster, Ottawa.]

There was an increase of \$85,958,981 in the value of the foreign trade of Canada for last year compared with 1910. The figures for 1911 were \$828,614,120 compared with \$742,655,139 for 1910, \$642,943,657 for 1909, and \$562,293,281 for 1908. Of the total foreign trade last year, 55 per cent was with the United States against 52 per cent in 1910 and 49 per cent in 1909.

The imports into the country increased in value about 18 per cent over 1910. Those from the United States increased 26 per cent, from the United Kingdom 5.2 per cent, from Germany 27.35 per cent, and from France 3.39 per cent. There was an increase of only a little over 1 per cent in the exports from Canada, and those to the United States decreased 1.65 per cent, and to France 17 per cent. Those to the United Kingdom increased 4.9 per cent, and to Germany 24.8 per cent.

The amount of duty collected during the fiscal year ended March 31, 1911, was \$72,935,639. The average duty on dutiable imports from the United States was 24.737 per cent, and on those from the United Kingdom 24.561 per cent.

Trade by Countries.

The following table shows the value of the imports into and exports out of Canada, by countries, for 1910 and 1911:

Countries.	Value of imports.		Value of exports.	
	1910	1911	1910	1911
United Kingdom.....	\$107,679,719	\$113,299,424	\$140,495,937	\$147,418,321
Other British.....	19,824,795	19,220,146	17,531,106	17,459,467
United States.....	270,644,736	341,192,612	117,145,555	115,203,454
France.....	11,376,879	11,763,291	2,728,627	2,257,789
Germany.....	8,782,174	11,184,790	2,717,301	3,393,213
Other countries.....	25,490,565	28,190,529	18,231,745	18,031,084
Total.....	443,804,868	524,850,792	298,850,271	303,763,328

Purchases from the United States and Other Countries.

Of the total imports from the United States last year, merchandise valued at \$186,836,477 was subject to duty and \$154,356,135 worth

admitted free, against \$143,777,541 and \$126,867,195, respectively, for 1910. Of the imports from the United Kingdom, \$86,575,640 worth of merchandise was dutiable and \$26,723,784 worth was admitted free, compared with \$82,451,681 and \$25,228,038, respectively, for 1910. The following table shows the principal imports and their value from the United States, the United Kingdom, and other countries during 1910 and 1911:

Articles.	From United States.		From United Kingdom.		From other countries.	
	1910	1911	1910	1911	1910	1911
Ale, beer, and porter	\$393,311	\$526,807	\$255,761	\$343,626	\$13,054	\$17,321
Animals, living	1,391,944	2,632,971	591,628	640,443	148,654	119,394
Asphaltum or asphalt	403,888	493,286	5,842	159	32,215	45,950
Books and periodicals	3,284,882	3,696,175	945,111	1,162,111	280,617	313,426
Breadstuffs	8,243,170	11,038,318	399,658	500,987	999,690	1,314,378
Bricks, tiles, etc.	1,478,104	2,044,126	568,723	587,612	1,484	8,270
Carriages, wagons, etc.	5,916,852	9,870,968	402,556	540,262	143,800	154,504
Cement	260,403	585,138	131,457	214,282	84,253	48,996
Coal, coke, and coal dust	30,211,620	40,973,385	174,044	198,721	8,253	8,253
Cocoa beans, chocolate, etc.	632,660	754,153	477,349	529,530	265,847	459,519
Coffee, including chicory	146,656	248,508	163,343	177,895	1,080,062	1,356,067
Cordage, twine, etc.	2,256,757	2,196,842	236,240	248,605	18,966	11,993
Cotton, and manufactures of	14,197,700	15,098,063	14,513,433	14,317,001	2,270,890	2,301,934
Drugs, chemicals, etc.	7,562,384	8,322,656	2,568,277	2,808,152	1,517,543	1,967,726
Earthenware, etc.	349,361	401,279	1,392,046	1,535,856	541,710	579,401
Electrical apparatus	4,258,711	4,962,584	344,023	534,521	156,785	207,102
Fancy articles	855,385	947,436	1,658,562	1,619,918	1,505,042	1,665,439
Flax, hemp, and manufactures of	458,438	411,548	4,068,006	4,138,530	1,018,478	1,475,798
Fruits	8,208,257	10,890,591	680,641	972,733	2,620,324	3,001,156
Furs and skins, and manufactures of	3,368,383	2,782,571	1,016,216	785,137	1,478,885	1,536,190
Glass, and manufactures of	1,061,994	1,255,490	1,065,796	1,102,139	1,294,711	1,518,804
Gloves and mitts	331,387	317,244	973,111	711,812	885,013	761,973
Grass, manila, and manufactures of	1,197,282	821,647	81,991	80,169	304,148	563,732
Gutta-percha, etc., and manufactures of	6,015,384	6,207,072	792,588	1,189,926	134,117	156,076
Hats, caps, and materials	1,452,967	1,663,162	2,173,966	2,203,465	248,518	286,263
Hides and skins, n. e. s.	2,333,483	2,357,737	1,040,009	844,570	5,018,579	4,485,974
Jewelry	928,282	541,353	321,585	376,809	250,421	302,895
Leather, and manufactures of	3,768,063	4,692,945	1,153,982	1,145,357	92,106	96,099
Metals and minerals, and manufactures of	75,566,008	95,731,688	18,971,540	18,879,537	4,154,695	4,814,641
Oils	6,653,669	7,551,458	740,758	918,104	334,695	465,945
Optical, photographic, and scientific instruments	869,111	1,057,434	249,370	289,423	121,462	143,718
Paintings, prints, etc.	1,716,815	1,009,180	619,738	754,723	177,124	399,522
Paper, and manufactures of	3,551,200	4,008,323	1,264,852	1,467,610	474,217	585,883
Provisions	3,899,767	5,095,544	204,809	330,259	469,375	621,905
Rags	809,714	774,308	236,369	195,354	67,100	113,031
Ribbons	118,198	132,437	659,947	665,651	736,674	768,428
Settlers' effects	10,125,615	9,647,855	3,934,449	4,724,893	115,845	297,233
Silk, and manufactures of	1,127,273	1,125,205	2,738,017	2,849,696	2,995,751	3,115,069
Soap	621,338	751,348	89,453	120,796	152,341	195,103
Spirits and wine	55,761	89,649	1,894,261	2,370,495	2,421,515	2,856,265
Sugar, molasses, etc.	362,583	397,063	1,526,179	1,576,694	14,960,272	15,158,893
Tea	57,653	38,691	1,765,827	2,184,049	4,165,662	3,365,056
Tobacco, and manufactures of	3,632,263	3,986,308	308,661	401,358	774,955	1,068,296
Vegetables	1,238,182	2,059,625	115,476	157,720	243,915	308,664
Watches	743,047	861,381	81,897	120,741	361,752	375,290
Wood, and manufactures of	15,445,069	19,688,738	326,570	463,875	379,104	412,891
Wool, and manufactures of	1,165,896	1,239,999	22,196,697	22,013,550	3,003,563	2,713,637
All other articles	23,410,558	27,155,098	11,732,646	13,203,858	6,843,858	7,715,802
Total	261,167,408	319,094,982	107,678,470	113,298,167	65,380,880	70,247,966
Coin and bullion	9,477,328	22,097,630	1,249	1,237	99,533	110,790
Grand total	270,644,736	341,192,612	107,679,719	113,299,404	65,480,413	70,358,756

American Automobiles, Cotton, Clothing, Fruits, Shoes, etc.

The value of the automobiles imported from the United States last year was \$5,416,776, or a gain of 60 per cent over the previous year. The automobiles imported from the United Kingdom were valued at \$328,984, a gain of 30 per cent. The United States supplied prac-

tically all the corsets imported, which amounted to \$442,318 worth. The raw cotton imported from the United States last year amounted to 74,978,410 pounds, valued at \$9,810,955. There was an increase of 30 per cent in the receipts of clothing from the United States compared with 1910, the total last year amounting to \$1,091,341 worth. The imports of clothing from the United Kingdom were valued at \$1,677,322, or a gain of only 8 per cent. Of the total imports of dried fruits and nuts, the United States furnished about one-half, or about \$2,680,000 worth. In green fruit the American product was practically the only one imported, of which \$2,241,201 worth was dutiable and \$5,723,915 worth free. Gunpowder and explosives were imported from the United States to the value of \$391,562, and from the United Kingdom to the value of \$1,032,291. American boots and shoes imported were valued at \$2,257,792, an increase of \$696,462 over 1910. Dutiable musical instruments were imported from the United States to the value of \$1,125,648, from the United Kingdom \$69,979, and from other countries \$1,125,648. American agricultural implements also showed an increased importation, the total receipts for last year being valued at \$4,443,620. Engines other than locomotives, including boilers, were imported from the United States to the value of \$2,502,489. Of the total imports of iron and steel and their manufactures, amounting in value to \$98,165,443 for last year, the United States furnished \$81,014,029 worth, of which \$73,342,868 worth was subject to duty. Of the mineral oil valued at \$5,236,835 imported from the United States last year, \$4,203,323 worth was admitted free.

Exports of Canadian Produce.

Of the total Canadian exports last year, valued at \$303,763,328, \$279,446,816 represented home produce and the remainder foreign produce. The following table shows the value of the shipments of home produce to the United States, United Kingdom, and other countries during 1910 and 1911:

Articles.	To United States.		To United Kingdom.		To other countries.	
	1910	1911	1910	1911	1910	1911
Animals, live	\$1,667,564	\$1,033,534	\$8,233,444	\$3,766,840	\$226,297	\$229,229
Breadstuffs	2,407,828	1,720,876	59,228,942	70,859,501	9,710,537	11,154,859
Carriages, carts, etc.	380,745	386,616	83,111	69,561	539,248	1,213,050
Coal, coke, and cinders	4,840,389	2,855,798	18,901	49,088	1,478,063	1,503,138
Cordage and twine	645,209	775,848	15,878	2,242	150,794	140,791
Drugs, dyes, and medicines ..	1,083,148	762,363	498,507	465,263	395,942	626,740
Fish and fish products	4,878,162	5,151,711	4,281,828	4,065,952	6,315,276	6,061,972
Flaxseed	3,888,523	528,640	2,479,705	998,789	2,000	34,460
Fruits	219,706	189,308	2,609,419	4,199,990	400,006	519,432
Furs, skins, and manufactures of ..	2,000,701	1,818,715	2,276,928	1,945,329	219,185	92,170
Gypsum or crude plaster	416,725	423,184	.....	.....	2	1,977
Hay	1,309,609	4,018,695	1,119,299	1,178,064	174,776	.....
Hides and skins, n. e. s.	4,648,891	4,851,130	108,270	71,931	8,426	29,800
Leather, and manufactures of ..	78,237	61,166	1,595,585	1,677,515	195,819	182,952
Metals, minerals, and manufactures of	29,663,605	31,125,399	7,266,146	6,580,872	7,717,887	7,839,551
Milk and cream	1,672,515	859,330	301	21,329	477,679	344,049
Paper, news print	1,935,514	1,968,320	314,506	242,618	884,489	831,653
Potatoes	31,552	6,494	167	525	767,445	497,876
Provisions	228,302	296,811	29,603,757	33,260,825	474,921	529,895
Bottlers' effects	1,789,273	1,668,405	120,815	140,865	74,981	59,994
Spirits, wines, and whisky	777,132	765,104	20,346	42,300	171,630	153,256
Wood: .....	.....	.....	.....	.....	.....	.....
Manufactured	5,011,728	5,012,192	1,093,568	454,680	465,741	434,094
Unmanufactured	30,177,340	25,127,282	11,955,231	10,029,961	4,759,891	4,161,632
All other articles	6,401,002	5,988,384	2,728,200	2,727,519	2,381,204	2,563,392
Total	106,153,900	97,393,305	135,662,854	142,848,549	38,052,839	39,204,962

Agricultural products represent the principal Canadian exports, the shipments last year being valued at \$98,527,518, followed by animal products with \$50,045,005, mineral products \$41,121,688, forest products \$39,403,098, and the fishery products \$15,816,992.

Exports of Wheat and Flour, Fish, Apples, Agricultural Implements, etc.

The exports last year of Canadian wheat and wheat flour amounted in value to \$74,242,815, of which only \$364,995 worth was shipped to the United States. All the fresh lobster exports, which amounted to \$592,994, were sent to the United States. Canned lobsters were exported to the United Kingdom to the value of \$1,105,720, to the United States \$911,197, and to other countries \$1,092,158. The shipments of canned salmon were slightly less than for 1910, the exports to the United Kingdom being valued at \$2,670,000, to the United States \$13,692, and to other countries \$718,494. The shipments of green apples to the United Kingdom last year were valued at \$3,913,871, a gain of \$1,576,723 over the previous year.

Canada exported agricultural implements valued at over \$6,000,000, an increase of over \$1,000,000 compared with 1910. Only about \$500,000 worth was sold to the United States and the United Kingdom, the largest purchasers being Russia in Europe and Australia, the latter country taking \$1,239,714 worth. For the fiscal year ended March 31, 1911, Russia purchased harvesters from Canada valued at nearly \$1,000,000, and consisting of reapers, mowing machines, and other implements. The shipments of iron and steel and their manufactures amounted to nearly \$9,000,000, an increase of \$750,000 over 1910.

The Dairy Industry—Field Crops—Live Stock.

There has been a steady decrease in the shipments of Canadian butter during the past 10 years. The exports in 1901 were valued at \$3,295,663, while during 1911 they were only \$2,080,688, in spite of the fact that during the period the price of butter has increased 31 per cent. The exports of cheese during last year were valued at \$21,443,031. The latest official statistics available showing the output of Canadian factory butter are for 1910, which give the total output at 59,875,097 pounds, valued at \$15,682,564, and factory cheese 231,012,798 pounds, valued at \$21,620,654. There were, in 1910, 3,616 factories in Canada engaged in the manufacture of butter and cheese. There were 12 condensed milk factories in operation and the output was valued at \$1,839,871.

The field crops of the Dominion for last year occupied an area of 32,853,074 acres; and the value of the output, according to the average local market prices, was \$565,711,600. [Statistics on the field crops for 1911 were published in the Daily Consular and Trade Reports for Jan. 26, 1912.]

The number of live stock on the Canadian farms at the end of 1911 was as follows: Horses, 2,266,400; milch cows, 2,876,600; other cattle, 4,210,000; sheep, 2,389,300; and swine, 2,792,200.

Output of Minerals, and Forest Products.

There was a decrease of \$3,241,445 in the output of the metallic minerals of the Dominion compared with 1910 and \$1,290,492 in the nonmetallic minerals, the total production for 1911 being valued at \$46,197,428 and \$56,094,258, respectively. Coal was the principal product, the output being 11,291,553 tons, valued at \$26,378,477, followed by silver, nickel, gold, clay products, and copper. [Statistics

showing the output of minerals in Canada for 1911 were published in the Daily Consular and Trade Reports for Mar. 26, 1912.]

The latest official statistics of the output of Canadian forest products are for 1910. According to these data the production of lumber, square timber, lath, and shingles was valued at \$83,987,197, of which \$77,503,187 represented lumber. Advance figures indicate that a larger quantity of pulp wood was used in Canada during 1911 than in any previous year. The total output of this product last year was 1,520,227 cords, valued at \$9,678,616, of which 672,288 cords, valued at \$4,338,024, compared with 598,487 cords, valued at \$3,585,154, for 1910, represented the home consumption. The shipments of pulp wood to the United States last year were valued at \$5,340,592, a decrease of nearly \$870,000 compared with 1910. The shipments of wood pulp to the United States amounted to \$4,872,790 as compared with \$4,901,899 for 1910.

Population—Land Sales—Immigration.

The population of Canada, according to the census taken in June of last year, was 7,204,527, of which 3,820,887 were males and 3,383,640 females. The rural population was 3,924,083, and the urban 3,280,444. During the 10 years ended 1911 the urban population increased 63.83 per cent, while the rural population gained only 16.48 per cent. The total increase in the population for 10 years was 1,833,212. The four western Provinces gained in population 174 per cent, while the five eastern Provinces gained only 17 per cent. In the older settled parts of Canada there was a decided movement from the farm during last year, some moving to western lands and others seeking homes in towns and cities. The disproportionate growth of urban population has resulted in a large increase in the value of town and city properties.

The land sales of the Dominion Government during 1911 numbered 1,030, representing 54,741 acres, and the average price was \$3 per acre. The total number of homestead entries during the year was 38,909. The entrants from the United States numbered 10,863 compared with 14,704 for 1910, of which 5,922 went to Saskatchewan and 4,633 to Alberta. The sale of land by the Canadian Pacific Railway Co. for the year ended June 30, 1911, was 650,874 acres, of which 19,097 acres were irrigated land. The irrigated land brought \$33.63 per acre and the other land \$14.11 per acre.

Immigration into the Dominion during 1911 reached a total of 350,374, an increase of over 15 per cent over the previous year. The arrivals from the United States numbered 131,114, a gain of 6,512 over 1910. Of the immigrants from the United States, Minnesota furnished 17,029, Washington 15,217, North Dakota 12,194, Massachusetts 12,000, Michigan 9,754, and New York 9,359.

Subsidies and Grants to Railroads—Canal Traffic.

The total railway mileage in Canada for the year ended June 30, 1911, was 25,400, an increase of 669 miles over the previous year. Of this gain, 70 per cent was in the western Provinces. The cash subsidies paid for railway construction in the Dominion up to the end of June of last year were as follows: From the Dominion, \$148,217,071; from the Provinces, \$35,919,360; and from the municipalities, \$18,042,823. The land grants to the railways totaled 55,256,429 acres, of which 32,004,486 acres were given by the Dominion. In addition to these subsidies and land grants, the Federal and pro-

vincial Governments have during recent years given material assistance by the guaranteeing of bonds valued at \$148,336,357. The average revenue per passenger per mile for the year ended June 30, 1911, on the Canadian railroads was 1.944 cents, and for freight per ton per mile 0.777 cent. [Further data on the Canadian railways were published in the Daily Consular and Trade Reports for Feb. 21, 1912.]

The freight traffic on the Canadian canals during the 1911 navigation season was distributed as follows in tons: Sault Ste. Marie, 30,951,709; Welland, 2,537,629; St. Lawrence, 3,105,708; Chambly, 599,829; St. Peter's, 75,298; Murray, 163,457; Ottawa, 320,071; Rideau, 172,227; Trent, 57,290; and St. Andrews, 47,135. Of the 38,030,353 tons representing the traffic through the several canals of the Dominion, 30,237,446 tons originated in the United States and 7,792,907 tons in Canada.

Industrial Development.

It is estimated that there are about 20,000 industrial establishments in Canada and the capital employed amounts to nearly \$1,000,000,000. The wages paid annually amount to over \$250,000,000, and the annual output of the establishments is valued at about \$1,000,000,000. The exports of Canadian manufactured goods last year were valued at \$34,500,000. Montreal is the principal manufacturing city in respect to capital employed and value of production, followed by Toronto, Hamilton, and Winnipeg.

Industrial activity was greater in the Province of Quebec than in any of the other Provinces, and the possession of immense water powers makes still greater development in manufacturing probable in the near future. The available water power in Canada is estimated at 17,000,000 horsepower. That developed in 1910, according to statistics recently published, amounted to 1,016,521 horsepower, of which 742,955 horsepower was for electrical energy, 158,051 horsepower for the paper and pulp industries, and 115,515 for other industries.

Steamship Subsidies and Industrial Bounties.

During the fiscal year ended March 31, 1911, the Dominion Government expended \$1,918,941 for mail subsidies and steamship subventions. The largest amount paid was \$600,000 for the service between Canada and Great Britain; \$180,509 was paid for the Canada and Australia (Pacific) service; \$146,000 for the Canada and South Africa service; \$100,000 for the Canada, Australia, and New Zealand (Atlantic) service; and \$193,750 was paid under special statute for service between Canada and France.

The total bounties paid by the Dominion Government for the fiscal year ended 1911, were \$1,597,663, and covered the following industries: Pig iron, \$261,433; steel, \$350,455; wire rods, \$526,858; lead, \$248,534; manila fiber used in binder twine and cordage, \$49,784; and crude petroleum, \$160,596. The bounties on iron and steel were paid to nine different companies. On June 30 of last year the bounty on wire rods expired. The only bounties now payable under Canadian statute are on iron and steel produced by electric process, lead smelted in Canada, crude petroleum, and manila fiber manufactured into binder twine and cordage. No operations, however, have been carried on under the provision for the production of iron and steel by electric process. Since the adoption of the bounty system in 1884 up to March 31, 1911, \$21,031,700 was paid in bounties.

Charters for New Companies, Amalgamations, and Business Failures.

During the calendar year 1911, 3,320 new companies secured Dominion or provincial charters, with a total authorized capitalization of \$1,148,554,783. These companies were distributed among the following Provinces: Ontario, 1,078; British Columbia, 684; Quebec, 509; Alberta, 495; Manitoba, 290; Saskatchewan, 215; New Brunswick, 45; and Nova Scotia, 4.

According to a financial publication there were 41 industrial amalgamations in Canada during the three years ended December, 1911, 39 of which had an aggregate authorized capitalization, including bonds, of \$334,938,266.

According to Bradstreet's agency, the number of business failures in 1911 was 1,401, involving assets of \$6,420,331 and liabilities of \$13,086,946. The failures in 1910 numbered 1,262 with liabilities amounting to \$14,514,650.

Strikes and Lockouts and Building Operations.

The total number of strikes and lockouts in Canada last year was 104, compared with 87 in the previous year. Of those last year, 33 terminated in favor of the employers, 23 in favor of the employees, in 21 cases a compromise was effected, and 27 cases were not settled at the end of the year.

Building permits issued in 10 Canadian cities having the largest building records gave an aggregate total value for last year of \$107,644,191, against \$94,129,432 in 1910 and \$64,509,620 in 1909. Toronto led with permits valued at \$24,374,539, followed by Vancouver with \$17,652,642, Winnipeg \$17,550,000, Montreal \$14,579,952, Calgary \$12,907,638, Regina \$5,099,340, Hamilton \$4,255,730, Victoria \$4,126,315, Edmonton \$3,672,260, and Ottawa \$3,425,775. All the foregoing, except Montreal, show an increase over 1910.

Clearing-House Returns, Canadian Revenue, and Banking Operations.

The clearing-house returns for the Provinces during last year amounted to \$7,385,470,053, compared with \$4,321,441,616 for 1907. The Province of Quebec led with \$2,503,807,021, followed by Ontario with \$2,298,808,410, Manitoba \$1,200,192,716, and British Columbia \$678,414,170. The city showing the greatest clearance was Montreal with \$2,370,487,623, followed by Toronto with \$1,852,397,605, and Winnipeg \$1,170,763,642.

The revenue of the Dominion for the nine months ended December 31, 1911, was \$99,482,947, made up as follows: From customs, \$64,103,989; excise, \$14,243,524; public works (including railways and canals), \$8,883,874; post office, \$7,150,000; and from other sources, \$5,101,559. The total revenue for the same period in 1910 was \$85,665,833. The total net debt of the Dominion on December 31, 1911, was \$313,386,651, or \$13,499,308 less than for the same period the preceding year.

The paid-up capital of the 29 Canadian chartered banks at the end of 1911 was \$107,994,604; the reserved fund, \$96,868,124; bank notes in circulation, \$102,037,305; specie held, \$37,464,226; and their total assets \$1,390,069,518. Two new banks commenced business during 1911, La Banque Internationale du Canada, with authorized capital of \$2,000,000, and the Weyburn Security Co., capitalized at \$1,000,000. It is claimed that the first institution is backed by about \$7,000,000 of French capital.

SIBERIAN ROUTE TO HONGKONG.

[From Consul General George E. Anderson, Hongkong, China.]

There seems to be a well-defined impression among American exporters that in many respects the United States has the advantage of Europe in transportation and communication with China and the Far East. At one time this was largely the case, but the advent of the Siberian Railway has revolutionized the situation and, so far as mail and express communication is concerned, Europe now has an immense advantage over the United States in its relation to South China, as well as to North China and Japan.

With regard to freight connections the Pacific coast of the United States and the average European port have about the same advantages with respect to Hongkong. North and west of Hongkong in China and in Japan freight by water communication from the west coast of the United States has a great advantage over that from Europe. South and west of Hongkong the advantage is with freight from Europe instead of that from the Pacific coast. However, even in this respect the advantage of the United States in Japan and Central and North China at present is more apparent than real, for the vast mass of freight from the United States for this part of the world is from the Eastern and Southern States and must be brought overland to the Pacific coast at great expense or taken to the east coast and shipped by way of Suez.

Mail Service Comparisons.

For mail by sea Hongkong also is substantially the dividing point of advantage between Europe and the United States. Mail from Paris and London for Hongkong via the Suez Canal arrives here in substantially the same time it does from New York and Washington, say 32 days on an average. About once a month the United States has a mail by way of Canada's subsidized mail line arriving here in about 27 to 28 days from New York. In mail by sea the United States has the advantage of Europe in all parts of the Far East north and east of Hongkong. However, this advantage has been lost in the development of the Siberian mail service.

At present not only has Europe the advantage of the United States in mail communication to China and Japan, but the United States itself, with the sole exception of the Canadian service referred to and excepting only Pacific-coast letters mailed on sailing days, can send mail more quickly and more directly by way of Siberia to Hongkong than by trans-Pacific steamer, and of course all the Chinese and Japanese cities to the north of Hongkong have all the more advantage in mail connection with Europe by the Siberian route. Mail is now sent from Hongkong to London or Paris or other European points three times per week in 16 to 17 days. The added time for connections and a trip across the North Atlantic to the United States still brings the transit period within that taken by the trans-Pacific route, besides having the added advantage of much more frequent service.

The increase in the amount of Hongkong mail now going by the Siberian route has been so great that, since the cost of sending mail by that route is greater to the Hongkong post office than it is by the all-sea route, aggregating 22 francs per kilo or \$1.93 gold per

pound, there has been a decided change in the Hongkong post-office budget and the subject has caused considerable discussion in the Hongkong legislative council. Probably nine-tenths of the originals of letters from Hongkong business men to the eastern United States now go via Siberia, the seconds going by the trans-Pacific route. It is significant that, while the leading American firms in eastern United States dealing with China send replies by the same route, the great mass of American correspondence still comes by the trans-Pacific route, as in former days. The advantage of the quicker route by way of Siberia needs to be better appreciated in the United States.

Quick Traveling Time Between Orient and Occident.

The trans-Siberian route development is a matter of world-wide importance. While its further betterment by short-cut railway lines is planned and will doubtless soon be realized, present possibilities have not been neglected and the time of transit for mails has constantly been shortened. The 7,443 miles from London to Vladivostok is covered regularly in 11 days. The journey from London to Japan by through trains, with complete sleeping and dining cars, is made ordinarily in 14 days and less. The trip from Peking to London is made in 12 days. The trip from London to Shanghai is made usually in 14 days, and from London to Hongkong in about 17 days. The trips in the opposite direction are practically upon the same schedule.

When the cut-off line from the present Kalgan railway line to the trans-Siberian system at Kiatka is completed, the time from London to Peking will be reduced to 9½ days. In 1909 the trip from Moscow to Vladivostok and Peking was reduced by 5 hours. In 1911 the train de luxe was speeded up so as to cover the route in one entire day less. With the completion of present railway improvements in Manchuria the trip to Japan will be shortened 2 days, a reduction probably to be realized the coming summer. At the same rate and with the Kiatka line complete, the trip from Paris to Peking will be made in 8 days. Even at present the service by rail to Central China and to Shanghai and the coast ports by steamer or rail is far ahead of anything to be expected by the trans-Pacific route now or indefinitely in the future.

The present service across Siberia is of practical importance to American business men even dealing with South China, and it should be utilized not only in mails to North and Central China but to Hongkong as well.

ANOTHER JAPANESE LINER.

[From Consul Carl F. Deichman, Nagasaki.]

The *Yokohama Maru* built at Nagasaki, for the Nippon Yusen Kaisha, had its official trial trips on April 20, and developed an average speed of 15.167 knots and a maximum speed of 15.369 knots per hour. The vessel was turned over to the owners on May 15, and will be employed on the Seattle-Hongkong Line and receive a Government subsidy [under the schedule described in Daily Consular and Trade Reports for Mar. 12, 1912]. The vessel is designed primarily as a freight carrier, but has accommodation for 28 first-class and 216 steerage passengers.

TRADE OPENINGS AT CUZCO.

[By Commercial Agent Frank R. Rutter.]

It was only three years ago that Cuzco, Peru, was first united by railroad with Arequipa and Mollendo. And with the coming of the railroad there has begun, or at least become apparent, the leveling movement which threatens to destroy in time the picturesqueness of the old Inca city, while at the same time it brings to the inhabitants many of the comforts and labor-saving appliances of modern civilization.

The Indian inhabitants of the town live in little houses with doors and windows opening on the sidewalks. Many of the people keep small shops and, while waiting for customers, may be seen industriously sewing, chiefly on hand sewing machines. Scarcely a house seems to be without its sewing machine, and the well-merited success of the agents in this line points the way to the introduction of other labor-saving devices. The general use of the sewing machine is the result of a carefully planned campaign that has extended over a decade. The trade in southern Peru is now profitable, but it was built up only after many years of effort and, doubtless, of preliminary loss.

The town of Cuzco has a population variously estimated at from 20,000 to 30,000, of whom the vast majority are Indians with simple wants and slow to change the habits which have been followed for centuries. New wants can be created and new methods taught only by actual and repeated demonstrations of the advantages offered, and such demonstrations are necessarily extremely costly. It is said that the Indian can live on a few cents a day. He eats the produce raised in the surrounding country and until recently clothed himself with homespun garments made from wool and the hair of the llama and similar animals, dyed with lasting native colors. Within the last few years cheaper dyestuffs have been provided by commerce, and coarser grades of cottons are now competing with the native woollens.

Character of Goods That May Be Introduced.

The commercial importance of Cuzco is not limited by the number of its inhabitants. It is the market place for a vast territory still untouched by railroads, although the construction of several in different directions is under consideration; on the back of llamas and burros the agricultural and mining wealth of the surrounding districts is brought into the town and exchanged for such commercial products as the market affords.

Coca (from which cocaine is obtained), cocoa, sugar, rice, and coffee are the chief farm products of the region. The most primitive implements are in use both in the cultivation and harvesting of the crops and in preparing the produce for the market. It is believed that a considerable market could be built up for improved appliances, provided that these were not too expensive and not too complicated for general use. Apparatus for drying coca leaves (the product shipped abroad in largest quantities), for preparing cocoa or cacao, and for extracting sugar are especially in demand. With the abundance of fruits and cheap wages canning might profitably be introduced, and machinery for such establishments be imported. Similar advantages exist for erecting slaughterhouses and soap factories. The demand for apparatus for such purposes may become effective in time, but

the need of better machinery for the agricultural industries already established is a present and pressing one which it is desirable that American manufacturers shall meet before machinery makers from other countries enter the field.

Apparatus Needed for Drying Coca Leaves.

The drying of coca leaves particularly is primitive in the extreme. The leaves are kept under shelter until there is good prospect for continued clear weather. Then they are dumped into the courtyard, which is usually paved with Belgian blocks, and for at least a week the leaves are swept around with brooms until they are sufficiently sun dried. The admixture of dirt and other impurities which results from this method can easily be imagined. Some practical method of artificial drying, if not entailing too great expense, would be welcomed by the more progressive farmers and once introduced could doubtless be brought into general use.

No one should attempt to enter the field, however, unless willing to stand some loss until his appliance becomes generally known. It might even be necessary, and would certainly be desirable, to keep a resident agent on the ground to supervise the installation, to give practical instructions in operating, and to make repairs.

A beginning has been made in the sale of improved farming implements. American typewriters are in demand, but their sale is limited by the number of establishments that carry on extensive correspondence. A similar field exists for office furniture.

Lack of Consular Representation.

The American exporter is at a distinct disadvantage compared with the German, French, Italian, Spanish, and Belgian exporter through the absence of any consular representative to report on the needs of the market and to inform him of any special trade opportunities that may arise. There is no American consular agent even at Arequipa, where most of the leading exporting countries are represented by prominent merchants, acting in the capacity of vice consuls. The nearest American consular agent is at Mollendo, 500 miles away, a distance that requires three days of travel by rail, and can be covered within that time only once a week.

CUBAN NOTES.

[From the Cuba Review.]

A milk-pasteurization plant at Cardenas is a new Cuban enterprise. It delivers milk in quarts, pints, and half pints at 13, 7, and 4 cents, respectively.

Electric light plants are projected for Calabazar Mata and Quemados de Gumes in Santa Clara Province to supply public and private demand for electric lighting.

Trolley extensions.—General Manager Frank Steinhart of the Habana Electric Railway Co. made formal application for a permit to begin the construction of two new important electric lines within the city.

Golf has been introduced in Cuba, the Country Club of Habana having a suburban tract of 125 acres on which a 9-hole course has been laid out. This will be extended to 18 holes. [The names of Habana dealers in sporting goods may be found in the World Trade Directory.]

Farm colonies.—The Veterans' Association has selected 100 caballerias (33,333 acres) in the Manzanillo and Guantanamo districts in Oriente Province for division among farmers who are veterans. The lands will be reserved by the State and delivered to the veterans, provided Congress authorizes the transfer.

VENEZUELAN BUSINESS NOTES.

[From Consul Thomas W. Voetter, La Guaira.]

Telegraph Line Extensions.

The telegraphic system of the Government has been extended to Ocumare de la Costa, the point between the La Guaira and Puerto Cabello, toward which the new road from the interior is being constructed.

During April the duplex system of telegraphy was established on several of the principal lines of the Government, and this system will be extended to the following places: Maracaibo, Barquisimeto, Trujillo, Merida, Rio Chico, and Cumana. The Ministry of Fomento has been authorized to purchase the necessary instruments for the service and to construct direct lines between Trujillo and Valera and between Rio Chico and Cumana.

Automobile Freight and Passenger Line.

The Government has given to J. M. Alamilla Ramos the exclusive right for 20 years to transport freight and passengers by automobiles or steam motors between San Felix, Upata, Guasipati, El Callao, and Turemero. He may use the present wagon road and must keep it in repair. The ordinary traffic by carts and mule trains is not to be interfered with. The free entry of machinery, tools, fuel, vehicles, etc., which the enterprise will need, is granted by the Government. There shall also be no national taxes imposed, and the enterprise shall also be privileged to use what national land it may need for buildings and to cut timber along the right of way on national lands for the service, repair of bridges, etc. The service is to be installed within a year after the approval of this contract by Congress. The address of the concessionaire is care Hotel Klindt, Caracas.

Change in Contract with Navigation Company.

The concession of the Compañía Anónima de Navegación Fluvial y Costanera is about to be modified according to a new contract between that company and the Venezuelan Government. The company is to renounce those parts of its concession which refer to the contracts of April 30, 1908, and July 17, 1909, with Andres Rodriguez Azpura and Moises Salas, respectively, and also that part of its contract of June 7, 1911, which refers to the exploiting and colonization of the Territory of Amazonas. In the future it will maintain four different steamer services:

(1) A line starting from Ciudad Bolivar, which shall touch at points on the Orinoco and its tributaries, the Apure, Meta, Arauca, Apurito, Caura, Masparro, Portuguesa, and Cojedes; (2) a line starting from Ciudad Bolivar through the mouths of the Orinoco, preferably those of Macareo and Pedernales, reaching to Port of Spain, Trinidad; (3) a line starting from Ciudad Bolivar, which shall end at Maracaibo, touching all the ports on the coast; (4) a line to navigate the Lake of Maracaibo and its tributaries.

The company has the right to establish radiotelegraphic apparatus in its ships and to establish telephone and telegraph as well as wireless stations in those points not covered by other services or by previous concessions.

One innovation is the reservation by the Government of anything which may be related with the canalization of the bar at the entrance of Lake Maracaibo, the Government retaining the right to contract for this work separately.

Drought Causes High Prices for Foodstuffs.—Locust Plague.

On account of the prolongation of the drought from which this part of Venezuela has been suffering the amount of cereals and other foodstuffs available for food has been growing less and prices have accordingly advanced on many of the prime necessities. A comparison of the wholesale prices at Caracas on November 13, 1911, and May 13, 1912, will show the range in prices. The quotations are for 100 pounds and the prices are in "pesos sencillos" of 4 bolivars each (bolivar equals 19.3 cents).

Articles.	Nov. 13, 1911.	May 13, 1912.
Polished rice.....	\$7. 25	\$8. 25
Common rice.....	6. 50- 6. 62	7. 75
Sugar, first guatire.....	12. 50-13. 00	17. 50-18. 00
Sugar, second guatire.....	11. 50	16. 00-16. 50
Starch, guatire.....	5. 75- 6. 00	10. 50-11. 00
Beans, black ¹	12. 00-12. 50	19. 00
Beans, white ¹	14. 00-15. 00	17. 00
Corn, white, new ²	5. 12- 5. 25	9. 50
Corn, yellow ²	6. 25- 6. 50	9. 50

¹ Per 216 pounds.² Per 212 pounds.

There have been requests to the Executive that the import duties on cereals be taken off in order to reduce the cost of food, but no action granting these requests has yet been taken.

Caracas newspapers state that in the State of Trujillo locusts have appeared in such large numbers and are doing so much damage that public aid is necessary to combat them and that a Government appropriation of \$1,200 has been made therefor.

Lighthouse Repairs—New Laboratory—Glass Factory—Silk-Goods Trade.

Repairs are to be made at the lighthouse on the islands Los Roques at a cost of \$1,190, which will include a new acetylene apparatus and replacing glasses in the lantern.

The president of Venezuela decrees the establishment of a laboratory of agricultural chemistry and biology in the Station of Seeds and Plants operating under the Ministry of Fomento; \$500 is appropriated for the first apparatus. The laboratory will afford a place for chemical analyses of soil, waters, fertilizers, and farm products, also for bacteriological investigation of animal and vegetable diseases. [The plan for a Federal agricultural school appeared in Daily Consular and Trade Reports for May 14.]

Fabrica de Vidrio y Cristal, of Caracas, has been granted one year's exemption of customs duties for importing the following articles: Machinery for making bottles, accessories for making objects of glass-ware, Glauber's salt, calcareous spar, soda, borax, pulverized marble, oxides, white sand, and clay.

American silk goods should find sale in this country. One merchant, however, states that recently he desired to send an order to the United States, but that the dealers there would not comply with his shipping directions. He stated that he desired to have the goods come by parcel post, as the shipping and entrance fees were less on shipments coming that way. He therefore desired the silks cut in pieces of 10 yards in order that the packages might come within the weight limits. He could not obtain compliance with his requests and did not order the goods. He wished to buy the full bolts, of course, but to have them cut before shipment to him.

BRAZILIAN DEVELOPMENT NOTES.

[From the Review, Rio de Janeiro.]

Construction enterprise.—The Cia Constructora de Santos, capital \$130,000, has been formed at Santos to build houses and deal in land.

Cotton mill.—The Cia Para Industrial, capital \$65,000, has been formed in the city of Para, State of Minas Geraes, for establishing a cotton mill.

Engineering.—Decree 9510 authorizes the Amazonas Engineering Co., capital \$250,000, domicile England, to undertake all kinds of engineering work in Brazil.

Mining.—The Central Brazilian Trust Co., capital \$250,000, has been registered at Somerset House, London, to work mining and other concessions in Brazil.

Caloric enterprise.—Decree 9512 authorizes the Caloric Co., capital \$100,000, of Goshen, N. Y., U. S. A., to operate in Brazil, the object being to extract oil and its products.

Fine-arts building.—The Secretary of the Interior has signed a contract for the completion of the fine-arts building in the Avenida, within a space of four months, for \$22,000.

Meat distribution.—The Cia Frigorifica Paulista is raising its capital to \$1,000,000 for supplying meat to the States of Sao Paulo, Minas Geraes, Goyaz, Matto Grosso, and Rio de Janeiro.

Cold-storage depots.—Decree 9505 authorizes the Empreza de Armazens Frigorificos, capital \$400,000, domicile Rio de Janeiro, to erect and manage cold-storage depots in Rio and other cities.

Structural steel.—Advices from London state that the Anglo-Brazilian Steel Structural Importing Co., capital \$375,000, has been formed there. Offices are to be opened in Sao Paulo and other Brazilian cities.

French enterprises.—The Banque Française pour le Brésil et l'Amerique de Sud, capital \$1,000,000, head office, Paris, is asking for authorization to operate in the Republic, as is also the Compagnie Assurance Générale, likewise domiciled in France.

Public works.—The Maceio Improvements Co. is issuing in Paris \$3,400,000 in 5 per cent debentures. The object is the improvement of the drainage system, water supply, lighting, and tramway service of the city of Maceio, capital of the State of Alagoas.

Oil exploitation.—The Standard Oil Co., of Brazil, capital \$500,000, has been authorized to operate in the Republic. The domicile of the company is in Fairmont, W. Va., U. S. A. The purpose of the company is to acquire oil-bearing fields and exploit the petroleum industry in Brazil.

Russian line to South America.—The directors of the Russian Volunteer Fleet are reported to be completing plans for establishing a regular line between Odessa and South America. Gen. W. N. Kisaeff, representing the company, is now on his way to South America to visit several ports there. The Russian Government has already given its sanction for the new line.

Sao Paulo Railway.—A cable from London states that negotiations are in progress between this company and the Sorocabana Railway for the purchase of the former by the latter. The Sao Paulo Railway

has maintained its dividend, including bonus, for the year 1911 at the 13 per cent level of the three preceding years. The company's total reserve and other funds amount to about \$10,000,000.

Gas profits.—The Sao Paulo Gas Co. shows profits for 1911 of \$329,000, and a dividend of 6 per cent, free of tax, has been paid on ordinary shares, making 12 per cent for the year. The company's installation of high-pressure lighting in the grounds of and streets adjacent to the new Municipal Theater, inaugurated on September 7 last, has proved a complete success. The large increase in gas consumption by private consumers, both for lighting and cooking purposes during the past year, is especially noteworthy, showing that as the city expands in area, population, and general prosperity, so will the business of the company go on increasing year by year.

New hotel.—Plans for the new Ritz Carlton Hotel submitted to the president of the Republic call for a triangular building, the apex of which will be at the corner opposite the Frigorifica, and the bases, one at the corner of the Rua Senador Dantas, and the other opposite the monument in front of the theater. A street will run obliquely from the corner of the Rua Senador Dantas to the Avenida. The main entrance to the hotel will be in this street, and will be very much like the Carlton in London, as it will give on to a palm court which will lead to the main dining room, the table d'hôte, the grillroom, and the rest. There are to be 500 bedrooms and 150 suites with bathrooms. There are to be eight floors, so the proportions of the building should be imposing. It is expected that the hotel will be ready for occupation in about two years.

CONDITION OF CUBAN SUGAR CROP.

[From Deputy Consul General Henry P. Starrett, Habana, May 14.]

The outlook for a large crop of sugar cane for the present season is very good, especially if the present dry weather conditions are maintained for a few weeks longer. The extremely favorable weather of the past two months is responsible for the continued grinding and consequent larger output of sugar. Up to the present there has been a total production of 1,487,081 tons of sugar with 150 mills still grinding. Last season at this time there was a total production of 1,302,552 tons with only 37 mills grinding. In view of these figures and reasonable weather it would seem that Cuba's output of sugar for this season should easily reach 1,750,000 tons. [Weather conditions in Cuba up to June 3 have continued favorable for grinding cane.—B. of M.]

URUGUAYAN REGULATION FOR PASSENGER VESSELS.

[From Consul Frederic W. Goding, Montevideo.]

A Uruguayan decree of February provides that all vessels taking on and discharging passengers at this port, enjoying packet privileges, which do not enter the anteport, shall be penalized by the loss of such privilege for six months for the first offense and permanent loss for a repetition. This requirement has been made because on a number of occasions, during rough weather, a number of passengers have been nearly drowned during transfer.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8946. Brass and copper tubing.**—An American consular officer in Canada reports that a company in his district desires to be put in touch with American manufacturers of all gauges of sheet brass, all gauges of sheet copper, brass and copper tubing, and braized brass and copper tubing. Correspondence with this firm should be in English.
- No. 8947. Rubberoid.**—A business man in a European country informs an American consular officer that he desires to be put in communication with American manufacturers of rubberoid with a view to representing them locally. This person handled large quantities of this material while in the Far East, and he is of the opinion that it could be largely introduced for roofing and bath-room flooring in the country in which he is now located. Samples, prices, discounts, and terms are desired.
- No. 8948. Sewing machines.**—Several large wholesale merchants in an Asiatic city have requested an American consul to put them in touch with manufacturers of sewing machines. These firms are willing to accept an agency in this line. American manufacturers of this line of goods should send illustrated catalogues and prices c. i. f. city of destination. All quotations should be given in English currency. The same information should also be sent to the consulate submitting the report.
- No. 8949. Topazes and mining machinery.**—A chamber of commerce in the United States writes the Bureau of Manufactures that one of its members residing in South America desires to find a market for pink and yellow topazes now regularly sent by him to Germany. If these stones could be sold in the United States it would facilitate his purchasing mining machinery and supplies. Samples of the gems may be seen at the office of the association.
- No. 8950. Passenger and freight elevators.**—An American consular officer reports that a resident of his district, who, it is understood, represents the contractors who are to erect a new terminal of a certain railway, is desirous of being brought into touch with American manufacturers of passenger and freight elevators and of receiving advertising matter in connection with the project now in hand.
- No. 8951. Building materials.**—A report from an American consular officer in a Latin-American country states that a firm in his district is desirous of securing the agencies of manufacturers of various building and construction materials, especially cement and structural iron and steel. Communications may be addressed in English.
- No. 8952. Automatic railroad ticket stamping machines.**—A business man in Spain informs an American consular officer that he would like to correspond with manufacturers of automatic railroad ticket stamping machines that he may secure the agency for the same. Correspondence should be in Spanish or English.
- No. 8953. Insurance agencies.**—An American consular officer has forwarded a letter from a business association in the Near East expressing a desire to get in touch with American insurance companies with a view to representing them in that region. The letter states that the present is a most opportune time for the establishment of agencies, and there is a vast field open to American companies writing fire, life, marine, and accident insurance. The latter form of insurance is practically unknown at present, and companies would do well to enter the field at once. Further particulars regarding this matter contained in the report will be sent to interested firms by the Bureau of Manufactures.
- No. 8954. Portable iron houses and iron bedsteads.**—A merchant in a Mediterranean country has informed an American consulate that he would like to be put in touch with American firms exporting portable corrugated iron houses suitable for warm climate. The same merchants also desires to be put in touch with American exporters of iron bedsteads. Correspondence in English.
- No. 8955. Sulphur oil.**—An American consul reports that a merchant in Greece desires to secure a reliable American firm to represent him as agent in the sale of sulphur (olive) oil in the United States. Correspondence in English.

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EXPORT PACKING.

CHINA.

[From Deputy Consul General J. K. Davis, Shanghai.]

The countries that have met with commercial success in China are those whose merchants, with a sincere desire to win and hold this market, have studied all its vagaries and have made such concessions as have been found necessary not only to satisfy the importer but also to insure the arrival of merchandise at destination in approximately as good condition as it left the factory.

In the past the attitude of most American manufacturers has been one of indifference toward the Chinese market, the idea seeming to have been that it was merely an outlet for surplus stocks, that there was little permanency to lines, that anything was good enough for the Chinese, and that if packing and methods passed muster in America they must be sufficient for China. Nothing is farther from the mark than that anything is good enough for China. As a matter of fact, the native merchant is a keen business man who knows exactly what he wants, how he wants it, and always has a good reason for wanting it so. He is familiar with local conditions, the hardships of handling, the climatic changes, and facilities for transshipment inland, and when he expresses a desire for some special packing it is because one at least of the unusual conditions demands it.

Improvement in American Packing—General Requirements.

The consensus of opinion among Shanghai importers to-day is that American packing is improving greatly, especially that done by important export houses which have taken the trouble to study the peculiar demands of the Chinese market. In fact, in many of the staple lines, such as kerosene, tobacco, and certain kinds of machinery, American packing is said to be even superior to that of other countries. That done by firms new in the Chinese trade, or which make only occasional shipments, is usually of a very insufficient character and frequently results in serious inconvenience and loss to the consignee.

A common complaint against the American packer is his disregard of the suggestions and requests of the purchaser for special packing. British and other European exporters usually adhere closely to instructions and make every effort to adapt their methods to the needs and wishes of the local trade. Suggestions by experienced importers in Shanghai are made for good and sufficient reasons, and disregard of them usually ends in the exporter's elimination from this market.

To put it generally, merchandise destined for China should be packed with a view to standing the hardest usage on the longest of voyages. Transshipping is frequently necessary; and if an interior market is the ultimate destination the merchandise, after landing in China, must undergo several additional transfers by primitive methods. In the absence of drays and trucks all freight is transferred suspended by ropes from heavy bamboos on coolies' shoulders, on wheelbarrows, and carts, or, if not too weighty, directly on the coolie's back. The merchandise frequently receives very rough treatment at the hands of these carriers. It is a common sight to see a large, unwieldy case rolled end over end down a slope without any effort being made to ease the impact or a load dropped from the coolie's back to the ground. Goods susceptible to damage from damp are frequently left out in the rain while the coolies, who are extremely sensitive to water, seek protection in some near-by doorway.

Climatic Conditions—Pilfering.

Climate must also be taken into consideration. This district is damp and humid, and all goods affected by mold or rust should be specially protected by oiled coverings, while metallic surfaces should ordinarily be well covered with grease or waterproof shellac. During what is known to the natives as the "yellow moldy season," the rapidity with which leather goods mold and tin and other metallic surfaces rust is almost incredible.

Another considerable reason for strong packing is the pilfering in godowns, or native warehouses. This is generally limited to removal of the outer fastenings, such as ropes and iron bands, but where cases are already broken or are easily breakable, the contents not infrequently suffer also. It is probable that no amount of care in packing can entirely prevent this, yet strong, well-nailed, iron-banded boxes are more immune than those which burst when merely dropped on the floor at a certain angle. Cases whose marks do not reveal their contents are much more likely to be immune than those bearing on the cover a description of the wares inside. It is probable that placing a description of the contents on the exterior of a package in English does little or no good as a means of advertisement. A descriptive "chop," or trade-mark, that the general public could recognize without deciphering might give the box some value as a medium of advertising.

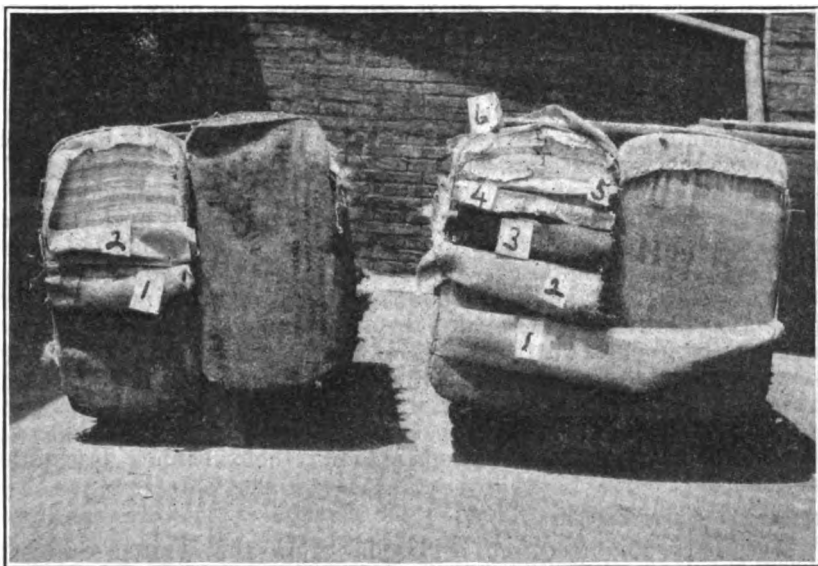
Size, Numbering, and Marking of Cases.

It is essential that American exporters adhere closely to buyers' instructions regarding the size, numbering, and marking of cases. Foreign merchandise arriving in Shanghai is subject to the Chinese customs duty, but when reexported to a foreign port, such as Manila, Hongkong, Weihaiwei, Tsingtau, Vladivostok, or Nagasaki, in the

original package, such duty is refunded by means of a drawback application. If, however, the case is unnumbered or is too large, so that the importer has to repack the contents into smaller compass he will lose the right to such drawback. It will be readily seen how serious may become any disregard of instructions as to size of case and numbering.

Cases that are too large also increase the cost of handling, as they can not be readily transported by the usual bamboo and wheelbarrow; those too heavy for four coolies to carry are handled with great difficulty and consequently are much more likely to receive rough treatment.

Merchandise generally moves inland by boats, which are of a certain width and length. Cases built to the proper dimension fit nicely into the cargo space, utilizing practically every inch contracted for. Other boxes as a rule do not fit and the shipper finds himself



American and British bales of piece goods.

paying for waste freight space, which does not please him, for the native is an extreme economist. The exporter who regards the importer's requests seriously and helps him to save a few feet of cargo space will get his orders.

The foregoing observations apply to all classes of merchandise shipped to this country. In the following I shall discuss the packing of some of the principal articles imported from the United States, pointing out wherein existing methods are unsatisfactory and how they may be remedied.

Packing of Piece Goods.

The most serious criticism concerns piece goods, the American packing of which has never been what it should be, and importers state that it is gradually becoming worse. The average bale consists of 20 bolts wrapped with a single cover of a very poor, brittle paper,

with an outer covering of single burlap, well roped. British goods are first incased in two layers of strong paper followed by a covering of heavy oiled or tarred cloth, and an outer layer of burlap or hessian cloth strongly bound with iron straps, which are put on many bales in addition to roping. Some of the British bales have along the four lateral edges wooden strips, which serve to distribute the pressure and greatly strengthen the bale. The Japanese, who in other respects pack their bales like the British, place on each lateral edge a quarter of bamboo, which, owing to its unusual toughness, is an improvement.

The difference between American and British packing of piece goods is strikingly shown by the illustration. The American bale (on the left) has (1) an outer single cover of burlap and (2) an inner cover of brittle paper. The British bale has (1) an outer layer of burlap covering both bales, (2) inner layer of burlap covering the individual bales, (3) tarred burlap covering each bale which sticks together at the edges in such a way as practically to seal each bale against moisture, (4) heavy outer paper cover, (5) heavy inner paper cover. The figure 6 indicates the end of the wooden strip that runs down the lateral edge beneath the outer burlap.

Most of the piece goods arriving in Shanghai find their way to interior ports, and while the American article, if not exposed to dust and rain en route, usually reaches this port in fair condition, it rarely survives the vicissitudes of carriage through the interior. The cheap brittle paper around the bolts breaks probably as soon as the ropes are drawn tight and dust sifts in through the burlap during the journey from the mills to Shanghai. No waterproofed paper being used, the first rain to which the bale is exposed on the open wharves of Shanghai or other points in transit to the interior carries this dust in unsightly streaks through the goods. The strips of wood or bamboo about the edges of the British and Japanese bales serve to hold the bales together when most of the ropes or straps have been purloined, and even when strips, ropes, and straps have all been removed the inner construction of the packing is generally strong enough to insure the goods reaching their ultimate destination undamaged.

Machinery and Automobiles.

Machinery imported into Shanghai from the United States is sent principally by large concerns, which, as a rule, take pains to pack with sufficient care to guarantee their wares reaching the consignee in good condition. Those who have not had the experience or have not benefited by that of others should remember that machinery for China should be much more strongly packed than for domestic trade, since the handling received by large, heavy cases is rough in the extreme.

To facilitate easy handling and minimize chances of breakage cases containing machines should be as small as possible. All parts should be snugly tight in the case or crate, as the least bit of movement may result in serious damage. Pieces of irregular form should be braced at every curve and angle, the box itself being reinforced inside and out to prevent its going to pieces if suddenly dropped. A very important precaution is the covering of the machinery itself in such a way that if the cases are exposed to rain the contents will not get wet, and it is advisable to cover all metal parts with vaseline or similar substances to prevent rust.

Automobiles from the United States are, as a rule, well packed, but improvements are possible. The most successful method seems to be to remove the wheels from the car and place the body on a stout platform, which becomes the bottom of the case, encasing each axle firmly in a strong wooden block bolted to the platform. A frame is then set up and the car planked in, the wheels being bolted securely to the interior side of the case. The frames of cases used for motor cars are usually strong enough, but it is said that the sides and top, which are made of 1 by 6 inch boards, are inadequate because there are no reenforcements, and crushing results when small heavy cases are rested or stowed upon them in the ship's hold. A few 2-by-4's at intervals of, say, 4 feet, should go far to prevent this. The cases should be lined with oiled paper or cloth as a protection against dampness, and metal parts liable to rust during the journey should be greased, two precautions quite necessary for this trade.

In some instances other goods have been placed in with motor cars. Importers strongly object to this, as the added weight increases the strain on the large surfaces and renders the cases more liable to breakage.

Stoves, Ranges, Hardware, Tools, Nails, etc.

Stoves and ranges from the United States are supplied usually by firms with long experience in the market, and they are generally well packed. Cases or crates should be strong and well strapped with iron at the ends, each article or part being so wedged as to prevent movement. Each package should also be as light as possible. For example, if a steel range is being shipped, the warming closet should be packed in one crate, the range proper in another, while lids and other loose pieces should be placed in a solid case with sawdust or other material added to prevent contact. All crates and cases should be lined with strong oiled paper as protection against rain and dampness.

Because of its weight, hardware should be packed in as small compass as practicable and in cases that will stand rough and frequent handling. Protection against damp should be supplied and close attention paid to the requests and suggestions of buyers, which, it is claimed, are frequently overlooked in these lines, the exporter insisting upon employing methods that, while suitable to the home markets, are not adapted to local needs. I have also heard it asserted that in this and other lines the American exporter makes a charge for marking packages with the importer's "hong" (firm) name in Chinese characters, although stencils for this purpose are supplied by the importer. European shippers make no charge for such marking.

Nails should be packed in strong kegs bound with four or five steel hoops and with reenforced ends; otherwise there is considerable breakage in every shipment, the loss ensuing from pilfering and other causes falling upon the foreign importer or the native dealer who buys from him.

Sheet iron should be shipped in packages of about 560 pounds, the sheets being bound together by 1 by 3 inch slats, five across each side, and the ends of each joined across the edges by steel hoops. With flat sheets it is necessary to run a slat lengthwise on each side to hold the transverse ones in place, but with corrugated sheets these

are not essential. It is specially important that the slats be strongly joined; otherwise the stealing in warehouse is considerable.

Tin sheets usually arrive in excellent condition. They are packed in five-eighths inch cases, tin lined and iron strapped, their weight varying from 90 to 120 pounds.

Slates, Leather, Shoes, and Typewriters.

Importers state that school slates from the United States frequently arrive in bad condition, because the ends of the cases, which are otherwise adequately strong, are too thin and not properly reenforced. Sometimes extra strips are placed on the outer edges of the ends, but these, while greatly strengthening the cases as a whole, leave the middle of the end, the most vital point, unreenforced and breakage results.

Leather should be packed in cases; when handled in bales the ends are frequently so battered and spoiled as to render it unsalable. Patent leather should always have waxed or oiled paper placed next to the finished surface, as the heat or the dampness it undergoes while coming out via Suez or Honolulu and after reaching Shanghai may cause it to stick and scar.

Among the importers of American shoes there seems some difference of opinion as to the efficiency of American packing, but it is gratifying to find the largest importers more than satisfied. If the shipper wishes the consignee to receive his cargo in satisfactory condition he must pack to protect against dampness, and have the cases stout and iron banded to prevent breaking and to give greater immunity from depredations in warehouse.

As a rule, American typewriters reach here in excellent condition. It is necessary to coat all rustable parts with vaseline or other similar substance to prevent deterioration before unpacking.

Tinned Goods.

With a few conspicuous exceptions the packing of American tinned goods does not compare favorably with European packing, and leaves much to be done in the way of adaptation to the requirements of the local market. Since the enforcement of the pure-food laws in the United States, which prevents the American manufacturer from placing on the market cheap and sometimes questionable tinned and bottled provisions, thus forcing him to confine his efforts to the sale of higher-priced stuff, adequate packing becomes more essential, as the breaking of a single bottle or tin in a consignment may mean the loss of all or most of the importer's profits, whereas with the low-priced goods slight damage was not so material.

As an example of the thoroughness with which the British study this market, the procedure of two of their largest provision firms may be cited. These firms send out representatives from home twice a year, who visit the local commission dealers for orders and also the various retail merchants, with the special object of ascertaining the condition in which their goods reach the consumer and to hear complaints. In this way the packers are able to discover many defects that the commission dealer, owing to the number of lines carried and his consequently divided interests, is not likely to report to the manufacturer even when he has been informed of them.

American packing cases are generally too thin and inadequately strapped. Tinned goods are commonly placed in the cases with no

paper wrappers to protect the labels and no sawdust to prevent the jostling of tins and the denting and leakage that frequently result. British provisions in bottles are inclosed in individual straw or corrugated cardboard jackets and intervening spaces are filled with sawdust, while similar American goods frequently arrive in sawdust with only a thin paper wrapper about each bottle, the result being that during the many handlings at various angles the sawdust shifts and many bottles are broken.

To keep labels always fresh and attractive, every precaution should be taken to attach them in such manner as to prevent discoloration by rust. During the wet season the labels on many tins are spoiled in this way and even during the dry months the points where glue or mucilage comes in contact with the tin become similarly disfigured. This can be prevented only by giving each tin a thin coating of paint or shellac before the label is attached.

Use of Air-Tight Boxes—Cereals.

Another precaution rendered necessary by dampness is that of having all tins for biscuits and cereals absolutely air tight. A certain type of supposedly air-tight box used by a well-known biscuit company, as well as other American exporters, has a round hole in the top into which a lid is forced and held in place by a strip of tin soldered across the top of the box. This no doubt proves very effective in the United States, but is inadequate here, and deterioration of contents results.

Another ineffective method of making boxes air tight is to place under the outer cover of the box a sheet of metal tissue, which, during the many handlings, is punctured by the contents being thrown against it. The only way to insure total exclusion of air is to solder the tin. One British company uses a tin that is very effective in this climate. Under its outer cover, which is easily removed, a thin sheet of tin is soldered, which covers about five-sixths of the top surface. The end of this sheet extends in the shape of a triangle over the remainder of the surface, which is of tin soldered firmly to the edges and does not come off. At the apex of the triangle is a flat ring. This top is perfectly air tight and is easily removed by inserting a hook or other convenient article (even a finger will suffice) into the hole and pulling steadily. The edges under this inner cover are beveled so that when it is removed there are no sharp edges to endanger the hands. Another company uses a box with a soldered-on top which is opened by means of a small V-shaped cutter supplied with each package. This gives satisfaction.

The packing of American cereals is usually inadequate to stand rough handling or afford protection against the deterioration that is the lot of cereals in this climate. One popular American breakfast food arrives in 2-pound cardboard boxes packed 36 to the case. This case has a $\frac{1}{8}$ -inch top and bottom, $\frac{1}{2}$ -inch sides, and $\frac{3}{4}$ -inch ends, with an iron strap around each end. There is usually a considerable loss from breakage, because of the thin boards used, and spoiling results from the inadequate protection from climatic conditions afforded by the paper boxes.

Another American cereal comes in 2-pound tins, packed 36 to the case, which has $\frac{1}{2}$ -inch sides, $\frac{3}{4}$ -inch ends, and $\frac{1}{2}$ -inch top and bottom, and usually arrives in fair condition. The defects in this package are

the want of paper around the tins, lack of iron bands on the cases, and containers that are not really air tight.

Another cereal is put on the market in 2-pound absolutely air-tight tins, 48 to the case, each wrapped in paper, and all packed in sawdust. The sides and ends of the box are of $\frac{3}{4}$ -inch material, the top and bottom of $\frac{1}{2}$ -inch, and the ends are iron strapped and strongly nailed. Cereals packed in this way arrive in excellent condition, cases unbroken, with no leaking or dented tins and no labels spoiled.

Tinned Cream and Milk.

The market for tinned milk and cream in China is steadily growing, and if American exporters take the trouble to observe the demands as to packing and labeling they should continue to enjoy no small share of it. At present several American brands are well known. The manufacturers of one have, so far, apparently used the same packing for China as for shipments in America. Their cases are a little too light, having $\frac{3}{4}$ -inch sides, $\frac{1}{2}$ -inch ends, and $\frac{3}{4}$ -inch top and bottom, with only a single wire belt around the middle of the box instead of iron bands at the ends. Each case contains forty-eight 1-pound tins packed without wrappings, or filling of any kind, and without any precaution to protect labels. The result of such packing is shown by the following letter, which was received by the Shanghai agents from a dealer in a southern port:

We have opened one tin and the cream is in good condition, but we are afraid that the label will not do for our market. We do not refer to the design, which is quite good, but to the effect of the gum used in fastening the label. We inclose samples, which are fair representatives of how the tins look. On examining the tins we find that where the gum has come in contact with the tin, the tin has corroded. The effect of this gives the tin a very secondhand appearance and which might lead one to believe that the same was old stock. This is what our dealers and also purchasers would think. Furthermore, many of the tins have arrived in an unsatisfactory condition, a large proportion having dents in the same, and the labels on most of them being torn. We consider that it would be unwise to put such samples on our market. The cream is good, so far as we can judge, but the appearance of the tins is far from satisfactory and in our opinion would condemn the "chop" on our market.

Another brand, while arriving in cases that are too light, has the advantage of strong iron straps at each end, which serve to strengthen the box and minimize loss by theft. Each tin is carefully covered with a wrapper on which the name of the brand and specially adapted directions are printed in Chinese. Thus the good appearance of the tins is preserved and the Chinese legend serves to introduce and identify the brand to the native.

Biscuits—Tinned Fruit and Vegetables.

One well-known American biscuit company sends its biscuits here in 5-pound tins, the ineffective tops of which have already been commented on. Two dozen such boxes are packed in a wooden case with $\frac{5}{16}$ -inch sides, $\frac{1}{2}$ -inch top and bottom, and $\frac{3}{4}$ -inch ends. Each end is reenforced with four $2\frac{1}{2}$ -inch strips and iron strapped. These biscuits frequently arrive in bad condition owing to the breaking of the thin sides. Moreover, the tins are not perfectly air tight, and dampness enters and ruins the biscuits themselves. A corresponding grade from Great Britain comes in 2-pound tins with soldered inner covers, which makes them really air tight. Fifty of these are packed in a case sufficiently strong to guarantee the safe arrival of its contents, its sides, top, and bottom being of $\frac{3}{4}$ -inch thickness and its

ends $\frac{1}{2}$ -inch. Each of its six surfaces is reenforced with two lateral wooden strips, $2\frac{1}{2}$ by $\frac{1}{2}$ inch, and both ends are strongly strapped with iron.

Other American biscuit manufacturers show similar defects in their packing to those mentioned; all should give attention to securing tins that will really protect against climatic conditions.

American tinned fruits and vegetables for China usually come in cases of two dozen 2-pound tins, innocent of paper wrappings. The average case has $\frac{1}{2}$ -inch sides, $\frac{1}{2}$ -inch ends, and $\frac{1}{2}$ -inch top and bottom, and is iron strapped at the ends. British goods have strong paper wrappers around all tins, which are frequently packed in sawdust, and the case is built $\frac{1}{2}$ -inch sides, $\frac{1}{2}$ -inch ends, and $\frac{1}{2}$ -inch top and bottom, with ends strongly iron strapped. This extra precaution is well worth while, for American tinned fruits frequently reach here with cases broken, tins dented, and labels spoiled.

Confectionery and Fresh Fruit.

The unsuitable packing of American candies has largely excluded them from this market. American confectionery comes in fancy cardboard boxes, a considerable part of which are filled with paper shavings or excelsior, which in paper containers does not protect the contents to a great extent, but needlessly increases the space occupied and hence the freight charges. They are never packed air tight and consequently soon lose their freshness. A European firm that enjoys practically a monopoly in the sale of standard-grade chocolates here packs its products in round tin boxes of various weights, the tops of which are constructed in such manner as to render them nearly air tight, and each piece of candy is wrapped in tin foil. This method would be very hard to improve on. Other varieties of standard candies are sometimes placed in air-tight glass jars or bottles and keep splendidly.

Fresh fruit is usually inadequately prepared. The sides of the crates are far too light and the fruit is not packed to prevent contact and consequent rotting. Some shippers, as a special concession, put an extra thickness on the side, but as even then the sides are only $\frac{1}{2}$ inch each in thickness, they are not strong enough. To guarantee the arrival of fresh fruit in good condition each piece should be wrapped in paper and the cases should have at least $\frac{1}{2}$ -inch sides, tops, and bottoms, and $\frac{1}{2}$ -inch ends. In addition there should be a division board across the center of the box of $\frac{1}{2}$ -inch material, which would tend to prevent crushing from outside forces. Under the present system it is a common sight to see the thin boards of these frail boxes broken in or pressed down upon the fruit greatly to its damage.

METAL GOODS FOR SOUTH AMERICA.

[From Consul General Robert P. Skinner Hamburg.]

The report that in spite of care in packing metal goods and structural steel work for the South American markets the packages are broken and the contents injured very frequently is confirmed in the experience of German as well as American shippers. No golden rule has been discovered in this country for overcoming the rough handling to which freight is subjected in South American ports,

although better results have been obtained than formerly by making smaller packages than those commonly forwarded.

Views of Shipping Line.

I have been favored with the following communication from the South American service of the Hamburg-American Line on this matter, the writer being familiar with every phase of the packing and delivery question:

If shippers wish to minimize the breakage of their cargo they must give particular attention to the packing, and take care that the cases are strong enough and bundles securely fastened. Of course the strength of the boxes must depend upon the size and weight of the articles to be packed and the distance they must travel, and this can best be decided by the manufacturers themselves, it not being easy for the steamship companies to set any standard as regards this.

Our experience with structural iron and rough iron shipped in bundles has not been satisfactory, and in many instances where the iron is bundled the bundles break apart on being handled. Here again it rests with the manufacturers to secure the bundles tightly in proportion to their length or weight, but our general impression is that the manufacturers pay very meager attention to this, perhaps because the objects are not of such value as boxed goods. The steamship companies running between the Continent and the River Plate demand from shippers that bar and round iron up to 7 meters in length and of less than 12 kilos in weight must be delivered in bundles of 50 to 60 kilos, while bar and round iron over 7 meters in length and less than 12 kilos in weight must be delivered in bundles of 80 to 100 kilos.

We are only able to emphasize that manufacturers can not supply too strong a packing, and if they could only be made to realize this they would at the same time bestow a great benefit upon the steamship companies, the latter being the first to suffer when a breakage occurs, claims at once being sent in to them by shippers.

German Packing of Metal Goods.

The general German rule in respect to metal goods for South America is to make up a bundle as small as the nature of the shipment will permit. Loose pieces of iron are sent singly instead of being bound together in bundles, unless it is pretty certain that the bindings can not come apart or slip. Pieces of structural iron or steel in straight or symmetrical shape are very likely to slip from their bindings; on the other hand, bundles can be made when the pieces are of irregular shape and provide notches or convenient holes for the wire. Large single pieces frequently have the ends boxed or wrapped with straw. The ends of pillars, girders, round iron, and T and U iron are painted to facilitate identification. Bedplates, circular rivet plates, and rectangular connecting pieces with holes are packed in cases. Shipments of cotton ties to Mexico are made in bundles, the ties being folded into three equal lengths and the bundles attached with three strands of wire.

Certain fairly absolute rules have been adopted with respect to bolts, rivets, and small metal goods. To Brazil goods of this kind are forwarded chiefly in kegs or occasionally also in cases which, packed, have a weight of 50 or 50.8 kilos (110 or 112 pounds); to Argentina, Chile, and other South American countries, in packages of not more than 46 kilos (101.4 pounds); to China, in cases which have a weight of 1 picul (133½ pounds); to other countries, in barrels up to 300 kilos (not recommended), double bags of 50 to 60 kilos (110 to 132 pounds), and cases of 60 to 100 kilos (132 to 220 pounds). It is not advised that shipment be made to any foreign country whatever in packages weighing in excess of 50.8 kilos.

While undoubtedly the conditions governing the handling of cargo in South American ports leave much to be desired, and while shippers

in their own interests should provide packages best adapted to meet such conditions, there is the reciprocal obligation resting upon the transporter, imposed upon him by the act of February 13, 1893, commonly known as the Harter Act, whereby he can not relieve himself from liability "for loss or damage arising from negligence, fault, or failure in proper loading, stowage, custody, care, or proper delivery of any and all lawful merchandise or property" committed to his charge.

HONDURAS.

[From Consul Arminius T. Haeberle Tegucigalpa.]

Owing to the unsatisfactory transportation facilities and the rough handling goods receive, the merchants of Honduras are naturally anxious to have merchandise shipped to this country packed with the greatest care. An instance of excellent packing according to instructions has been called to the attention of this consulate, and it illustrates what can be done if importers' instructions are followed. Sixty-six packages of small statuary were so packed as to arrive in perfect condition, not a single piece being broken. Each piece was separately tied and wrapped in tissue paper and soft excelsior. The box, which was well made, was lined with soft excelsior. Extra charges were made for this, but the importer was glad to pay the amount in consideration of the excellent results.

The same merchant ordered 24 plates of glass, which were not packed according to instruction. The entire lot was smashed and was thrown overboard in Amapala. It is said that corrugated paper is superior to any other kind of wrapper for glassware. Small vases or flasks should be placed in tight-fitting boxes of this material stuffed with soft excelsior, or, if glass plates are shipped, two layers of corrugated paper should be placed between each plate in an excelsior-cushioned box. It has been found that even very hard jolts will not injure glassware thus packed.

Four transshipments and several weeks of jolting on the ox cart before the goods reach the capital necessitate extreme measures of careful packing when goods are sent to the interior of Honduras.

An example of inadequate packing has been called to this consulate's attention in connection with a shipment of porcelain shades, white enamel shades, and porcelain cut-off switches. The tin shades were more carefully packed than the porcelain, and almost all of the latter were damaged. They were still in the original boxes, so that the nature of the packing could be ascertained. The tin shades had cardboard caps to protect the tops, while the porcelain shades were not protected at all. The porcelain switches were packed only in cardboard boxes. Sixty-four boxes were in good condition, 30 damaged, while 6 switches were completely destroyed.

SALVADOR.

[From Consul General Thomas Ewing Dabney San Salvador.]

The experience of four large firms of San Salvador in connection with shipments of hats from an American exporting house reveals some of the obstacles to the development of American trade in this country. The hats received are practically unsalable here, first,

because of the condition in which they arrived, due to inadequate packing; second, because their colors are not adapted to the local taste.

These hats were shipped by parcel post in corrugated pasteboard boxes of the maximum dimension permitted by law. The containers, although demonstrated capable of sustaining a weight of 150 pounds, were not strong enough to afford protection to their contents. American parcel-post packages are treated exactly like newspaper packages, a fact that can not be brought home too often to American shippers. Placed in the usual unprotecting bag, they are dropped into the ship's hold, with other packages and boxes thrown on top. They are furthermore subjected to severe handling at the points of transshipment and during the mule-back trip if they go via Puerto Barrios. To avoid the mule-back journey, they should always be sent via Panama. Most of the packages examined were broken and crumpled flat, with resultant damage to the contents.

One of the firms about the same time received a shipment of hats from Italy, which suffered no damage whatever. The containers for these were made of a tough and hard felt composition at about the same cost as the corrugated boxes used for the American hats.

Disregard of Importers' Instructions.

With regard to the colors, each shipment from the United States consisted of black, coffee, and two shades of a dingy chestnut. Against the blacks and coffees there is no complaint, but the chestnuts are absolutely unsalable. What suits the taste of the United States does not suit the taste here. The traveling salesman who took the orders received ample and explicit instructions on this point, which, it appears, the exporter ignored, sending the colors he thought the Latin American trade ought to want. The exporters in the United States need to grasp thoroughly the fact that the Latin American knows what he wants and will be satisfied with nothing less. The Italian hats mentioned run 10 live colors to the dozen. It is no wonder that in spite of the proximity of the United States Salvador buys most of its hats from Italy, the imports therefrom in 1910 being valued at \$17,081, as compared with \$909 from the United States. Imports from the United States in 1908 were valued at \$2,120 and dropped to \$1,256 in 1909.

A further illustration of disregard of the importers' wishes was furnished when one firm's instructions to ship the hats by freight in a \$2 trunk were ignored. They were sent instead by post in pasteboard boxes, for which a charge was made and on which the transportation charges were practically the same as the freight would have been. Had the goods been shipped as directed, they would have arrived in perfect condition and the trunk could have been sold at a profit.

EGYPT.

[From Consul David R. Birch, Alexandria.]

The principal fault found with the packing of American goods imported into Egypt is that the cases are not secured with iron bands. A visit to the general merchandise storehouses of the customhouse on the quays at Alexandria, where thousands of cases containing every kind of goods from every country are stored pend-

ing clearance, showed that in almost every instance damage had resulted to American articles because of the absence of iron bands around each end of the case. Similar merchandise from countries in Europe was found to have arrived in good condition, but every case of goods from Europe was fastened with the iron strips.

In a store set apart by the customs administration for damaged goods were found five cases containing soap from a well-known Philadelphia factory. Each of the five had been broken and had almost reached the stage of falling apart when taken from the importing steamer. These boxes contained 82 pounds of soap each and were made of wood one-fourth inch thick, the same as would be used for the local trade in and near the factory. Despite the extreme thinness of the cases, they would probably have arrived in good condition if iron bands had been placed at each end. That the addition of such bands serves as an insurance against damage would seem to be proven by the arrival free from damage of about 100 cases of a well-known cereal from Chicago. These were no thicker than those used for the soap, but a thin iron band nailed to each end of the cereal cases brought the goods to Egypt without damage to a single box.

Starch, Pianos, Furniture, and Typewriters.

In a consignment of several hundred cases of starch from Chicago thin wood was used for the cases and no iron-band supports. Perhaps one-fifth of the boxes were broken, entailing a loss of a portion of the starch from each broken box; in some instances almost the entire contents were gone. The floor of the storehouse was covered with starch. These boxes contained 44 pounds each and were packed in $\frac{1}{4}$ -inch cases.

Two American pianos, destined for Luxor, were well packed, with the exception of not having iron supports. One of the cases was broken and possibly the instrument damaged to a slight extent, but this was evidently due to rough handling en route.

Office furniture is one of the most profitable American articles imported into Egypt, but a firm having showrooms in Cairo and another with a store in Alexandria complain about the packing. They state that rarely does a shipment of furniture arrive without some portion of it being damaged because of the insecurity with which the articles are fastened inside the cases.

Importers of American typewriters say that no matter how rough the handling or how frequent the transshipment these machines always arrive in perfect condition. Considering the delicacy of the mechanism this statement may be regarded as a tribute to the method employed by typewriter houses, and an indication of what American packers can do when proper care is taken and the requisite interest shown in this very important element in retaining and expanding foreign sales.

There is no direct line of steamers from the United States to Egypt, and transshipment must be made in Italy, England, Greece, or Germany, thus entailing an extra strain upon packing cases. Instead of being more weakly packed, the goods coming from the United States to Egypt should be cased more strongly than those from European countries in order to withstand the necessary transshipment and extra handling.

CANADA.

[From Consul Felix S. S. Johnson, Kingston.]

Canadian regulations as to the packing and shipping of fruit are set down in the inspections and sales act, the more important provisions of which are here given, as they will probably be of interest to American dealers.

Every closed package (box or barrel) must be plainly and indelibly marked with the name and address of the packer, the name of the variety, and the grade. The word "fancy" or No. 1, No. 2, or No. 3 must be used to designate the different grades. "Fancy" grade must be perfect fruit, No. 1 grade 90 per cent free from all defects, and No. 2 grade 80 per cent free from defects causing material waste and containing no culls. The faced or shown surface must be the same grade of fruit as the rest of the package.

The minimum size of the apple barrel is 26½ inches between the heads inside measurement, a head diameter of 17 inches, and a middle diameter of 18½ inches. The apple box must be 10 inches in depth, 11 inches in width, and 20 inches in length, inside measurement. Fruit baskets are of four sizes, namely, 15 quarts or more, 11 quarts, 6 quarts, and 2½ quarts.

The act provides a severe penalty for the alteration, effacement, or obliteration of marks on any package that has undergone inspection.

AUSTRIA-HUNGARY.

[From Vice Consul Orestes De Martini, Trieste.]

Investigation among the principal importers of American goods disclosed complaints as to the packing of lard, bacon, cotton, shoes, cotton goods, and agricultural machinery. Faulty addressing has occasionally caused inconvenience and loss in cases of transshipment. In regard to the character of packing required for various American goods I would make the following suggestions:

Barrels used for lard should have an extra hoop at each end. Bacon should be packed in cases of stiff wood strengthened by iron bands covering the joints. Cotton goods should be packed with a lining of tarpaulin to protect them from dampness and the outer covering should be secured by metal bands. The outer cases for shoes should be at least 1 inch thick, and the inner boxes should be stowed as compactly as possible to prevent the contents from getting loose on the voyage. The inadequate baling of American cotton has been dealt with in various reports and remedies suggested. In the packing of agricultural machinery stronger cases are needed adequately to protect the heavier parts. The use of internal cleats and iron bands is suggested.

All marks and numbers on packages must be plainly visible to prevent confusion and wrong delivery. Weight, tare, etc., if given in the language of the country, greatly facilitate customhouse formalities.

Wireless telegraphy in Peru.—Supplementing the report published August 21, 1911, Consul General W. Henry Robertson, of Callao, advises that direct wireless communication has been established between Lima and Iquitos (across the Andes Mountains) without the use of intermediate stations.

COMMERCIAL CONDITIONS IN BADEN AND ALSACE-LORRAINE.**KEHL.**

[By Consul Mlle A. Jewett.]

The consular district of Kehl embraces the Provinces of Alsace-Lorraine and the larger part of the Grand Duchy of Baden, in southwest Germany, and is a region of great industrial and commercial importance. It includes the cities of Freiburg, Baden-Baden, Offenburg, Rastatt, Strassburg, Metz, Mulhausen, Colmar, and some 40 others.

The Grand Duchy of Baden has a population of 2,010,000 and an area of 5,823 square miles. The most important industries are agriculture and the manufacture of woolen and cotton goods, machinery, silk ribbons, paper, leather, tobacco, china, glassware, clocks, jewelry, and chemicals. Beet sugar is also made and the district is celebrated for musical boxes and mechanical organs.

Alsace-Lorraine has an area of 5,601 square miles and about 2,000,000 inhabitants. Its people are noted for their thrift and industry. It is rich in mineral resources and its industries are many, varied, and progressive. This Province is very favorably situated for commerce, being in contact with Prussia, France, and Switzerland. It has about 1,300 miles of railroads, and has also the advantage of the great river traffic on the Rhine all along its eastern border and some of the most important canals of Europe.

Commercial Activity During Last Year.

Although 1911 was not favorable for agriculture in this consular district, as bank rates increased and money was scarce, still the industries of this region kept up well and on the whole enjoyed a fair year. The year began rather brilliantly and, but for the withdrawal of foreign capital in the latter months, might have been one of unusual business activity. Some of the crops suffered considerably from lack of rain in the summer, which reduced the purchasing capacity of the agricultural population, but freight rates were lowered, exportation increased, and more goods were sold abroad than usual.

Most of the factories worked full strength throughout the year, many improvements and additions were made to existing factories, and new ones are planned to be built this year, notably a cement factory at Molsheim, which will employ about 400 men, and a great textile and spinning mill at Strassburg, with a capital of \$625,000. A great many factories are building homes for their employees, notably at Mulhausen and at Singen.

Mining Industries Increase Their Production.

Alsace-Lorraine produces about 30 per cent of the entire iron output of the German Empire. In 1911 there were 54 mines working and the total production of iron ore was 17,754,571 metric tons (metric ton=2,204.6 pounds), against 16,654,144 tons in 1910. About 52 per cent of the sales, which totaled 17,369,734 tons, went to the foundries of Alsace-Lorraine, 3 per cent to France, 2 per cent to Belgium, and the rest to other parts of Germany. The production of pig iron in Alsace-Lorraine was 2,360,245 tons, ingot iron 1,342,786 tons, wrought iron 22,336 tons, and cast-iron ware 85,815 tons.

The coal output in 1911 was increased, but considerable difficulty was experienced by the mines in getting a sufficient supply of cars

and other transit facilities during the earlier part of the year to move this coal to the markets. Later, when the crops had been moved, the local market was flooded and considerable coal was exported to France and other countries. The total coal production of Alsace-Lorraine in 1911 was 3,033,436 tons, 12 per cent more than in 1910. Of this amount, 221,456 tons were used at the mines and 2,811,980 tons were sold, of which 316,285 tons were exported to France and 185,377 tons to Switzerland. Coke to the amount of 90,275 tons was manufactured at one of the mines and 4,557 tons of coal tar, 1,175 tons of sulphate of ammonia, and 787 tons of benzol.

The development of the potash deposits of Alsace has been rapid, and the production for 1911 would have been much greater but for the limitations imposed by law. All of the known mines of kali in Alsace have, it is believed, been bought up by the syndicate. The output of 1911 was 102,644 tons, about three times the amount extracted in 1910.

Asphalt and petroleum are also produced in Lorraine to a considerable extent. The output for 1911 was 5,002 tons of asphalt and 43,748 tons of petroleum. It is reported that important new deposits of petroleum and of coal have been found recently in these regions.

There are eight salt works in Alsace-Lorraine. The production was 60,791 tons in 1911, 67,690 tons in 1910, and 63,484 tons in 1909. The value in 1910 was \$6.59 per ton. Table salt retails for 2 to 2½ cents for coarse and 2½ cents per pound for fine. Salt used for agricultural and industrial purposes enjoys exemption from local taxation.

General Agriculture—Unusual Wine Trade.

About 64 per cent of the area of Alsace-Lorraine and 56 per cent of Baden is devoted to agriculture. The chief crops are cereals, potatoes, hops, wine, and hay. The number of winter agricultural schools has increased from 7 to 13, and all are well attended. These schools seem to modernize and greatly improve the agricultural methods in this district, naturally resulting in the use of more agricultural machines.

The past year was the second successive bad year for the farmers; 1910 was too wet and 1911 was too dry. The long-continued drought of the summer seriously affected several important crops. In the Black Forest of Baden 17,800,000 young trees were killed by the drought, causing a loss of about \$150,000 and entailing an expenditure of another \$150,000 to replace the ruined trees.

The principal field crops of 1910 and 1911 in Alsace-Lorraine were as follows:

Crops.	1910	1911	Crops.	1910	1911
	<i>Metric tons.</i>	<i>Metric tons.</i>		<i>Metric tons.</i>	<i>Metric tons.</i>
Wheat.....	182,150	208,399	Potatoes.....	1719,262	1670,390
Rye.....	81,541	82,991	Clover.....	275,011	178,904
Barley.....	88,829	93,886	Lucerne.....	187,397	127,348
Oats.....	197,842	175,855	Meadow hay.....	1,141,296	803,681

¹ Half crops.

The wine crop of 1911 was a little below normal in Alsace-Lorraine, but was considerably larger than in 1910. The quality was fair, and prices of new wine were maintained at an average of about 42 cents

per gallon. The average yield of Alsace-Lorraine is about 22,000,000 gallons per annum, or one-fourth of the entire production of wine in the German Empire. The total value of the wine crop in Alsace-Lorraine for 1911 is estimated at \$8,330,000, a figure which has been equaled but once since 1875. Seventy-five thousand acres of land are devoted to wine culture in Alsace-Lorraine and 40,000 acres in the Grand Duchy of Baden. In Baden 1911 was an exceptionally good wine year. The total crop of this Province was about 8,900,000 gallons, against 1,162,000 gallons in 1910, and the value was about 10 times as much as in 1910.

Tobacco, Hop, and Potato Crops.

The tobacco crop of 1911 in this district was reported to be excellent, but no statistics of its amount are yet available. For the culture year ended June 30, 1911, the acreage was slightly increased in Alsace-Lorraine; and the crop was 8,410,500 pounds, against 7,039,500 pounds in the previous year. In Baden the crop was exceptionally good. The total tobacco acreage in 1910-11 was 42.6 per cent of the total German tobacco fields, and the crop was 23,894,100 pounds, or 47.6 per cent of the entire crop of Germany. Baden tobacco averages better and higher priced than the tobacco of other parts of the Empire.

The hops of this district are particularly fine in aroma and color and constitute an important crop in Alsace-Lorraine. Nine-tenths of the hops are grown in lower Alsace. The acreage was slightly less in 1911 than in 1910, 9,753 acres to 9,854 acres, and the crop was 7,032,200 pounds in 1911, against 11,132,940 pounds in 1910. In 1909 the crop was a failure, and in 1908 it was unusually large.

The potato crop in this region was only about half the average and great quantities were imported from abroad as well as from other Provinces of Germany to meet the demand. During a portion of the year the customs duty was removed from potatoes, owing to the scarcity, and some of the municipalities bought and sold potatoes at cost to the city employees and workmen and to the soup kitchens, and at a slightly higher rate to the public markets. In this way Strassburg sold 1,433,000 pounds of potatoes, expending the sum of \$14,850, which was nearly all covered by the receipts from sales.

Textile and Other Manufacturing Industries.

In Alsace-Lorraine about 140,000 persons are engaged in the textile industries, and in Baden about 40,000 persons. In 1909 Alsace-Lorraine had 1,638,000 spindles at work.

The cotton mills fared better than the woolen mills, but the year was not up to the average in either branch. The high and speculative price of raw cotton had a depressing effect on the cotton-goods industry. Production was cut down by the majority of the mills by working fewer days in the week, but no mills shut down entirely during the year. Owing to high prices and to the tight money market, sales were smaller than normal. The competition of Italian mills is being felt more and more by the German mills.

The woolen-goods mills report a bad year. Wool was high and advancing and at the same time the wholesale dealers in woolen goods refused to raise prices to keep up with the price of wool. The prevailing fashions in women's dresses cut down the demand for dress goods perceptibly. The woolen spinning mills did fairly well

in spite of unfavorable conditions. As a rule they have large capital and reserve funds that enable them to keep up their work and pay regular dividends out of the reserve funds when necessary. One large company with capital stock of 4,000,000 marks (\$952,000) and 4,000,000 marks reserve funds, having 95,000 spindles and employing 1,500 hands, increased its dividends from 6 per cent to 10 per cent. Most of the mills paid 4 to 6 per cent dividends.

The jute mills did a rather unsteady business owing to the fluctuating and advancing prices of the raw material. Prices were highest in May and June and lowest in July, ranging from \$6.45 to \$4.66 per hundredweight (112 pounds) for raw jute and \$6.66 to \$5.71 per hundredweight for manufactured jute.

Wages of mill hands in general advanced somewhat in 1911, but not in proportion to the increase in the cost of living to the workmen.

Pottery, glassware, and chemical products factories had a fairly prosperous year, while conditions in the shoe and canning factories and tanneries were unsatisfactory.

Rhine River Commerce.

The total Rhine traffic in 1911 at Strassburg harbor was 1,089,000 tons, a decrease of 114,000 tons from the total of 1910. The water was lower than in 1910 and traffic was stopped during 37 days, giving only 328 days for navigation. Traffic on the upper Rhine from Strassburg to Basel was considerably reduced by the low water during the latter part of the summer. The decrease in the Rhine traffic was chiefly in coal and coke and this was due as much to the bad condition of the coal market as to the low water. The shipments of coal and coke to Strassburg were 107,000 tons less in 1911 than in 1910. Petroleum and crude oil were 5,200 tons less and piece goods 8,700 tons less. On the other hand, cereals show a total of 20,300 tons more than in 1910. At the Kehl Rhine harbor, 820 vessels entered in 1911, discharging 212,160 tons.

The canal traffic at Strassburg was 2,000 tons greater in 1911 than in 1910, although navigation on the canals was interrupted for some six weeks during 1911.

Markets for American Goods.

As most of the American goods used in this district come indirectly from other cities, it is impossible to ascertain their amount, but American goods of all sorts may be sold here if they correspond to the needs and tastes of the people. There is plenty of money here, and the country can buy what it wants. But American goods must present distinct advantages of price, quality, or style to compete with goods of local manufacture. There is a strong sentiment here in favor of patronizing home industries, which is fostered by commercial associations and the public press. Local manufacturers seem to fear foreign competition and are loth to give foreigners any information in regard to their business, even when doing so could not work any harm.

To be sold here, goods must first be seen by the purchasers. Catalogues will not create new business. In the last three years not a single local buyer has taken advantage of the collection of American catalogues displayed at this consulate.

American sewing machines seem to almost monopolize this market. It is claimed that one American company, through its German-American branch, sells as many sewing machines in this district as all other foreign and German companies combined. The reasons for this seem to be thorough organization, competent exclusive local representation, extensive advertising, liberal terms on the installment plan, and the system of carrying complete stocks of all varieties of machines and of all repair parts and keeping expert repairers and demonstrators at accessible places.

American-made shoes are selling here, but not to a large extent, as they entered this market only after German-made American-style shoes had developed into a well-made and popular imitation. Their sale may also have been hindered by the fact that stores that handled them did not carry sufficiently large and varied stocks to meet all the demands. American shoes are carried in some department stores, together with local makes, but such stores do not push the American shoes enough to create an important business in them.

The United States buys large quantities of eyeglass lenses from this district and sells a considerable quantity of eyeglass frames, especially gold bows and frames, to opticians here.

New Enterprises and General Progress.

Progress is being made in almost all lines of enterprise and industry in this district. Iron and coal mining are developing. Large new iron and steel works are approaching completion in Lorraine, notably the foundry at Hagendingen, which will have an enormous capacity. New factories for the manufacture of paper, Portland cement, sugar, machinery, and glassware, cooperage works, spinning and weaving mills, electrical works, and many minor industries have been completed or are under way.

The mileage of railroads has been increased slightly and traffic has increased considerably. Street railways increased in Alsace-Lorraine from 84.5 miles in 1910 to 88.9 miles in March, 1911. The number of persons carried in 1910 was 34,548,670 and in 1911, 36,254,043. Improvements on canal and river navigation have been made and are still being pushed with considerable activity. In Strassburg, extensive and important work is being carried out in new street construction and other public works. Building operations were fairly active in 1911. The industrial and commercial prospects at the beginning of the year look promising for 1912.

Exports to the United States.

The exports to the United States and its insular possessions, as invoiced at this consulate, reached the record amount of \$3,915,268 in 1911. The heaviest increases over 1910 were noted in the items of thread, artificial silk, confectionery and chewing gum, machinery, and India paper. Dress goods, underwear, hair nets, clocks, skins, wall paper, pottery, and goose-liver pies fell off. Goose-liver pies are the celebrated specialty of Strassburg, where 250,000 geese are said to be fattened and killed annually, besides large imports of goose livers from Austria-Hungary. The Strassburg manufacturers complain that their business is seriously injured by the French *paté de foie gras*, which they claim is not pure goose liver.

The principal exports to the United States for 1910 and 1911, as declared at this consulate, are shown in the following table:

Articles.	1910	1911	Articles.	1910	1911
Automobiles (chassis and parts).....		\$36,422	Machinery.....	\$446,433	\$490,410
Books.....	\$82,063	99,362	Musical instruments and parts thereof.....	66,346	65,590
Buttons.....	13,895	23,710	Paper goods:		
Chemicals:			India paper.....	24,792	62,832
Barytes.....		5,355	Packing paper.....	28,333	24,405
Fertilizers.....	71,228	90,206	Paper boxes.....	4,649	3,942
Other.....	57,143	42,309	Papier-mâché.....	17,826	30,603
Church vestments and ornaments.....		8,444	Wall paper.....	60,242	51,352
Clocks and parts thereof.....	97,509	60,048	Other.....	51,434	18,027
Confectionery and chewing gum.....	33,551	147,997	Pottery and earthenware.....	22,727	8,046
Gelatin and glue.....	87,707	122,078	Spirits, wine, beer, etc.....	6,195	7,903
Glassware:			Steel:		
Eye and watch glasses.....	57,848	71,704	Bars.....	34,616	57,870
Hollow glassware.....	53,390	41,939	Steel wool.....	11,420	9,047
Other.....	70,564	64,733	Tool steel, not manufactured.....	22,204	49,118
Goose-liver pies.....	34,318	32,177	Textiles:		
Hair nets.....	95,180	64,907	Dress goods.....	510,530	306,354
Hides and skins:			Hatters' plushes.....	35,994	42,420
Calfskins.....	10,812	34,419	Artificial silk.....	77,721	173,323
Cow and ox hides.....	6,004	1,206	Thread.....	427,408	909,877
Hare and rabbit skins.....	402,327	323,555	Underwear.....	22,306	8,685
Other.....	51,239	14,424	Other.....	62,248	73,634
Hops.....	26,596	33,578	All other articles.....	155,689	119,477
Horsehair (imitation).....	14,078	14,380			
Leather goods.....	35,196	25,319	Total.....	1,391,804	3,871,187

The exports to the Philippines in 1911 consisted of clocks, \$710; underwear, \$10,254; and other articles, \$12,457; making a total of \$23,421, against \$38,880 in 1910. Clocks to the value of \$129, against \$811 in 1910, comprised the total exports to Hawaii, and motor trolley automobiles to the value of \$3,647 were the only shipments to Porto Rico in 1911. The exports to Porto Rico in 1910 consisted of \$113 worth of thread.

MANNHEIM.

[From Consul Samuel H. Shank.]

The industrial situation in the Mannheim district during 1911 was better than had been anticipated and showed a marked improvement over the preceding year. In spite of local and foreign disturbances, drought, and increase in the cost of living, business in almost all branches showed a favorable development.

In spite of the political disturbances, the money market was satisfactory. The rate of interest was reduced from 5 per cent at the beginning of the year to 4½ per cent on February 6 and to 4 per cent on February 18, at which it remained until the demand for moving the crops necessitated a rise to 5 per cent on September 19, where it remained during the rest of the year. The total exchange at the Mannheim branch of the Imperial Bank amounted to \$1,619,149,500. All of the private banks report good business and one of the largest declared a dividend of 8½ per cent.

General Crop Returns—Exceptional Grape Harvest.

It was thought that the extreme heat had almost ruined the hop crop, but rains came in time to save it. While not up to the average in quantity, the crop proved to be greater than was anticipated and was of most excellent quality. The total amount of the German hop crop was 23,870,000 pounds, as compared with 44,000,000 pounds in

1910. In consequence of the fear that the crop would be a total loss and the fact that the hot weather increased the consumption of beer, the price of hops rose to \$95.20 per 110 pounds, the highest since 1882.

The tobacco crop was only about three-fifths of an average. The excessive heat spoiled the quality to such an extent that little was available for cigar making. Most of the tobacco in this district is used for making smoking and chewing tobacco and snuff. The prices were \$5.95 to \$8.30 per 110 pounds.

The grape harvest was the fourth largest in 40 years and, on account of its excellent quality, the prices received have not been equaled in that time. The value of the total crop in Baden in 1910 was \$595,000 while the 1911 crop is estimated at \$5,117,000. The fruit was so rich in sugar that no addition of sugar was allowed by the authorities and the wine of 1911 will probably remain a standard for many years.

The potato crop was a medium one, but larger than that of the previous year and of fine quality. On account of the small crop of 1910 the prices were much higher than in recent years.

The grain crops were all good. Wheat and rye showed a slight increase in production, while oats and barley showed a small decrease.

Manufacturing Interests Active.

A general increase in output is shown in all lines of manufacture, but the increased cost of production prevented an increase in earnings. Reports from 186 manufacturers show an increase in production, while 61 report a decrease. Cost of production in two-thirds of the cases reported has increased and in no case has it been reduced.

The chemical factories which manufacture substances used in making powder and explosives were directly benefited by the war between Italy and Turkey and political disturbances in various parts of the world. In pharmaceutical factories the production was as large as in 1910, but competition from foreign factories made the export business more difficult. The fertilizer manufacturers report a successful year due to the increased demand, especially from abroad. The color manufacturers shared in the general prosperity and, as in the past, were able to declare good dividends.

Exceptions to the generally favorable reports are those from the textile and glove-leather industries. The textile manufacturers suffered from exceptional prices of raw material until late in the year, and in consequence of the high cost of manufacture were unable to show much profit. The large crop of cotton brought a reduction in price, but too late to materially offset the bad conditions existing up to that time. The glove-leather industry suffered from the fact that styles changed to knit gloves and there was no demand for leather.

Jewelry, leather, steel, machine, and other industries report a general increase of business but little or no increase in earnings, owing to increased cost of production.

Transportation—Labor Conditions—Food Prices.

The transportation movement by water was not so large as in 1910, as there was not so much water in the Rhine as in the previous year. However, the decrease was immaterial and was partly due to a strike of the dock hands. The railroads show an increase in both the number of persons carried and the amount of freight hauled.

Labor conditions were fair during 1911. The number of laborers in the Mannheim district increased about 3 per cent over 1910. Only 6 firms report a decrease in the number of workmen employed, while 100 report increases. Some manufacturers complain that it is impossible to secure workmen who are sufficiently skilled even when high wages are offered. This is especially true of skilled mechanics in the machine factories. Of 294 factories reporting, 218 had increased the wages during the year. None reported a reduction in wages. In Baden there were 852 firms and 31,353 workmen involved in strikes and lockouts during the year.

Most articles of food show an increase over 1910 prices. The cost of meat of all kinds, eggs, milk, coffee, and vinegar increased, while flour, bread, peas, and buckwheat were a little cheaper. Wood and coal also show a little reduction.

Trade with the United States.

There is no great opportunity for extension of American trade here, as it is already well established in most lines. For example, one store in this city handling office supplies carries over 100 different American articles and a hardware store over 50. However, the purchasing power of the general public is constantly increasing, and careful introduction and energetic pushing for business should show satisfactory results.

The principal exports to the United States, as invoiced at this consulate during 1910 and 1911, are shown by the following table:

Articles.	1910	1911	Articles.	1910	1911
Automobiles.....	\$203,266	\$214,884	Grindstones, etc.....	\$5,280	\$1,074
Books and calendars.....	1,868	6,578	Hides and skins.....	281,678	271,982
Caramel.....	5,109	8,805	Hardware.....	2,706	17,919
Celluloid goods.....	25,779	23,754	Hops.....	42,796	53,498
Chemicals:			Household goods.....	6,100	7,824
Alkaloids.....	126,170	161,749	Iron and steel, and manufac-		
Aniline salt.....	27,464	39,976	tures of:		
Benzoic acid.....	26,919	18,946	Iron.....	64,522	17,608
Carbolic acid.....	70,972	153,301	Machinery.....	87,843	51,544
Chrome alum.....	25,349	14,442	Steel.....	123,787	83,583
Hydrate of alumina.....	33,019	22,548	Jewelry.....	236,050	205,831
Hydrosulphite.....	45,615	104,004	Jewelry cases.....	61,927	75,966
Muriate of ammonia.....	55,166	80,610	Leather.....	253,108	186,509
Phenol.....	40,092	36,722	Lye.....	25,535	5,988
Quinine.....	180,523	151,838	Metal tubes.....	29,144	781
Other.....	235,053	247,281	Mineral water.....	6,794	6,036
Cork paper.....		69,386	Paper.....	12,285	13,241
Cuttings, hide.....	567,691	583,331	Rubber goods.....	5,616	4,698
Dyes and colors:			Seed.....	175,792	178,520
Alizarine.....	483,018	688,606	Tinware.....	120,778	189,964
Aniline.....	884,199	853,503	Waste.....	297,983	291,208
Indigo.....	746,085	760,202	Wine.....	62,842	77,966
Earthen and stone ware.....	1,326	12,885	Wood pulp.....	668,931	500,931
Filter pulp.....	16,816	34,987	All other articles.....	143,814	43,854
Garlic.....	12,384	9,276			
Gelatin.....	67,162	82,711	Total.....	6,501,747	6,669,393
Glue.....	5,471	10,848			

The exports to Porto Rico amounted to \$7,090 in 1911, of which \$6,121 was jewelry. To the Philippines were sent goods to the value of \$9,486, the principal items being indigo, \$1,373; jewelry, \$2,372; machinery, \$2,377; and perfumery, \$2,371.

Ghee, or clarified butter, which largely enters into the food of the natives of India, has risen in price from 4 cents to 20 cents per pound in the past 20 years. Consul Stuart K. Lupton, of Karachi, adds that at the higher price it is said to contain two-thirds of coconut oil.

CONSTRUCTION WORK ABROAD.**ARGENTINA.**

[From Consul General R. M. Bartleman, Buenos Aires.]

Commission on Commemorative Monuments.

An Executive decree has been issued creating a commission on commemorative monuments. This will be presided over by the intendente (mayor) of Buenos Aires, and the membership will be composed of the Director General of Architecture, the president of the American Historic and Numismatic Commission, the president of the National Academy of Fine Arts, and the director of the National Museum of Fine Arts.

Said commission is to revise the general plan of the public monuments now under construction or to be constructed later. It is to suggest to the Minister of Public Works improvements in the beautification of surroundings and general harmonization of the public commemorative monuments.

It is made the duty of the Director General of Architecture of Argentina to cooperate with this commission and to place at its disposal all plans, schemes, data, etc., available.

Proposed Marine Esplanade.

An interesting scheme has been advanced for constructing a big avenue 3 miles long and 165 feet wide on land reclaimed from the River Plate by erecting a wall 13 feet thick. This avenue would have a pavement 36 feet wide on either side and a double-track tramway service in the center. Among the conveniences mentioned are underground stations containing a salon for first aid, a police station, lavatories, a pier with bathing places, social-club building, casino, theater, amusement places, etc. The proposer of the scheme is Senor Julio Thibaut, the proprietor of the Eden Hotel, Olivos, near Buenos Aires, whom the newspapers report as having at his disposal the necessary capital to carry out the work.

BRAZIL.

[From Chargé d'Affaires George Barclay Rives, American Embassy, Petropolis.]

Construction Payment on Battleship.

The Brazilian Government has authorized the payment of an installment of \$1,300,000 to the English firm of Armstrong, Whitworth & Co. (Ltd.) on account of the construction of the battleship *Rio de Janeiro*.

URUGUAY.

[From American Minister N. A. Grevstad, Montevideo.]

New Bids for Large Bridge.

All seven of the bids for constructing a bridge across the Santa Lucia River at its mouth, in the Department of Montevideo, have been rejected as defective in one way or another. Most of the bidders were German firms. No American firm had submitted bids.

The Department of Public Works has requested the Bureau for Roads and Bridges to prepare a new call for tenders in two parts, one comprising the substructure and the rubble work and the other the metallic or superstructure. It is estimated that the amount

involved in this contract approximates 1,500,000 pesos (\$1,551,000). It was a disappointment to Americans here that the American bridge firms did not take part in the competition for this important work. Possibly the competition may be more attractive now that bids may be submitted separately for the stonework and the metallic superstructure.

[A notice of the call for tenders for this bridge was published as Foreign Trade Opportunity No. 7203 in Daily Consular and Trade Reports for August 21, 1911. The blue prints and specifications which were referred to in that notice are still on file in the Bureau of Manufactures.]

VENEZUELA.

[From Consul Thomas W. Voetter, La Guaira.]

Concession for Two Traction Lines.

The Venezuelan Minister of Fomento has signed a contract with Carraciolo Parra Picon by which the latter is to construct two traction lines. One is to start from a point near Merida or Mucuchies and is to join another from Tovar or Bailadores. The terminus of each line will be the station of El Vigia on the railroad from Santa Barbara to El Vigia, or a dock on the Rio Chama, which the concessionaire will construct in case the river be used instead of the railroad for communications with Maracaibo Lake. The concessionaire is to purchase the railroad mentioned from the Government and to change the course of the Chama at El Vigia. He may use electricity or steam to operate the line and transport freight or passengers therewith. The address of the concessionaire is Carraciolo Parra Picon, Salas a Caja de Agua, No. 59, Caracas.

DOMINICAN REPUBLIC.

[From Vice Consul General Frank Bohr, Santo Domingo.]

Surveys and Plans for Public Works.

In addition to the construction work plans for this Republic, as noted in Daily Consular and Trade Reports for January 8, March 1, and April 20, 1912, the following may be noted:

(1) Construction of a railway from this city to connect with the lines in the north of the Republic. Approximate length, 80 miles. Surveys already completed by the Department of Public Works (Obras Publicas) of the Dominican Government. Correspondence should be with John L. Mann, Director General of Public Works, Santo Domingo, Dominican Republic.

(2) Proposed construction of a waterworks for the city of Santo Domingo. Surveys and plans at present being made by the municipal engineer. Correspondence should be with the President of the Honorable Ayuntamiento, Santo Domingo, Dominican Republic.

(3) Construction of a drainage system and raising the land level of the city of Macoris. Surveys and plans already completed. Correspondence should be with the President of the Honorable Ayuntamiento, Macoris, Dominican Republic.

ENGLAND.

[From Vice Consul James Fisher, Hull.]

The New Dock at Immingham.

The new deep-water dock at Immingham, which was unofficially opened for traffic on May 15, is a notable engineering achievement. On what five years ago was dreary marshland, what is possibly the deepest dock in England has been constructed. Its depth ranges from 30 to 35 feet in the dock basin, and the total water space, exclusive of locks, amounts to about 45 acres, the full length of quayage being 4,500 feet, while there is a large area of land available for extension. The entrance lock has a length of 840 feet, a breadth of 90 feet, and a depth ranging from 27½ feet low-water spring tides to 47 feet high water. About 3,500,000 cubic yards of earth have been excavated and used in raising the land around 5 feet above its original level. Two long jetties extend out on either side of the entrance, curving around midway in order to run parallel to the river. One jetty is intended as a landing place for passengers, and the other is being used for the shipment of bunker and cargo coal. From the main dock extends a large graving dock. Several powerful cranes are provided on the dock side, and the coal-handling plant is comprehensive. There are eight coal hoists, each served by a set of full railway sidings, and each capable of dealing with about 700 tons of coal per hour. Siding accommodation is provided for over 11,600 cars, carrying, in all, 115,000 to 174,000 tons of coal. For the grain trade a large granary has been erected at the east end of the dock, while the northwestern arm of the dock forms a large timber pond, and a light railway and an electric railway system link Immingham with Grimsby, and it is hoped in time to carry the tramway right round the dock estate. The dock being close to an important industrial and coal area, the proprietors (the Great Central Railway Co.) are most hopeful as to its future.

AN AMERICAN'S WORK IN URUGUAY.

[From American Minister Nicolay A. Grevstad, Montevideo.]

Dr. Daniel E. Salmon, who, during the last five years has been director of the State Veterinary School of Uruguay, has resigned from this position and returned to the United States. His contract with the Uruguayan Government was for four years, but he consented to remain another year, as the work of construction and organization proceeding under his supervision had been delayed on account of circumstances not within his control.

Dr. Salmon's work in Uruguay is said to have been highly creditable to himself and eminently beneficial to the people of the country. Under his immediate direction one of the finest veterinary schools in the world has been built, equipped, and organized. He is said to have established a high standard of teaching and to have created a desire for original research. He returns to the United States to carry to conclusion important scientific investigations concerning the nature and cure of tuberculosis. His work in this country has earned for him the respect and gratitude of the Government, as it ranks among the most important in the field of American educational influences in Uruguay.

COTTON CULTURE IN TURKESTAN.

[From Consul General John H. Snodgrass, Moscow, Russia.]

The Russian press has been giving some attention to the subject of cotton culture in Turkestan, the climate of which, according to a recent newspaper article, is not favorable to the growth of ordinary varieties of this fiber, due to the short summer. The selection of a cotton plant giving a good crop and ripening early in the season is therefore of the greatest importance to Turkestan.

In 1903 American seed was purchased and sent to Turkestan. Part was cultivated at the Andreevsky plantation, part on private lands, and the success obtained was such that in 1908 several firms joined in purchasing 3,000 poods (pood = 36.112 pounds avoirdupois) of American seed. That year turned out to be a very bad one for cotton growing, owing to a rainy spring and early autumn, and the results from the American seeds were not especially satisfactory, so that only a few cultivators retained them. Two landowners who had received "Floridora" seeds obtained good crops and early ripening.

In 1910 and 1911 three early-ripening varieties were received in the Tashkent district—the Triumph, King, and Cook. The last-named was found unsatisfactory, but the other two gave good results, the Triumph seeds especially yielding a very good crop. On the Government plantation of "Kaplanbek" the American seeds yielded 93 poods per dessiatine (2.7 acres) under favorable conditions, and 70 poods in one instance where the first sowing had to be repeated, while the general crop was only 40 to 60 poods. According to the classifiers of the Moscow Exchange, the fiber of this cotton is very strong. [A previous report on Turkestan cotton appeared in Daily Consular and Trade Reports on Feb. 17, 1912.]

More American Seed Ordered—Development Plans.

An order for seeds of the Allen and Floridora sorts, as well as the New Columbia and New Egyptian, with long fiber, has been sent to the United States during the current year.

According to the Ruskoye Slovo, there are three plans for the development of the cotton culture in Turkestan under discussion. One is to extend the area of the cotton fields and include all the irrigated land. To extend the cultivation of cotton at the expense of maize, wheat, etc., would mean, it is said, a further rise in the price of the necessities of life, which has already become a serious question in Turkestan. Another plan contemplates the irrigation of waste land. This, it is said, would involve the expenditure of many million rubles, while the results would not be shown for 10 years or more. The third plan consists in the regulation of the water supply and the improvement of the legal and financial condition of the "dihkans," or small cultivators. [The irrigation of Turkestan with relation to cotton culture was reviewed to some extent by Consul General Snodgrass in Daily Consular and Trade Reports on April 25.]

The principal producers of cotton are said to be the owners of the small plantations. Most of them are said to be very poor and dependent upon the banks for capital to run their plantations, which is repaid with cotton at a high rate of interest. It is thought that no improvement or development in the cultivation of cotton is possible until the condition of the "dihkans" is improved.

Results of Tour of Investigation.

A later issue of the same newspaper contained the following interview with a member of the party which made a recent trip of investigation to Turkestan:

Turkestan promises full compensation not only for the sums of money spent to increase the productivity of the country but also for the much greater sums that will be required in future. The very favorable conditions of both soil and climate will make Turkestan the center of cotton production, and there is every reason to expect that Turkestan and Transcaucasia will yield such quantities of this fiber that the same will be exported and the \$60,000,000 paid yearly to America will remain henceforth in Russia.

The necessary measures have been ascertained, the program of work established, and steps have been taken toward the practical realization of the same. These are, first of all, the irrigation of new territories in the Ferghana and Samarkand districts, which is to be carried out by the Government as well as by private persons. Very favorable results have been obtained by the Government with the water of the River Syr-Daria. A group of Moscow merchants has offered to irrigate 250,000 to 500,000 acres in the Kara-Kum steppe.

The Agricultural Department will endeavor to introduce cultivation of cotton by machinery, which represents a great saving and will, consequently, tend to develop the business. Measures will be taken to secure the necessary number of workmen, the best method being the settling of immigrants.

SOUTH AFRICAN NOTES.

[From Consul E. A. Wakefield, Port Elizabeth, Cape Province.]

Quick Handling of Freight.

A record for South African ports in landing and shipping cargo was recently made at Algoa Bay during the week ended April 20. The English mail boat usually arrives early on Thursday morning of each week and departs about 6 p. m. the following day. The steamer did not arrive until mid-afternoon, and it was about 4 o'clock before a commencement was made at discharging cargo. Notwithstanding this, the harbor board department landed 2,417 tons of general cargo without delaying the steamer, and during Friday night 1,350 tons of this cargo was forwarded by rail to the Transvaal and Orange River Colony. As the Government line is only 3-feet gauge, with comparatively small freight cars, this record is creditable.

Ostrich Feather Trade.

By the mail steamer of April 20 the value of the shipments aggregated over \$75,000, composed principally of ostrich feathers. The ostrich-feather market is exceedingly good, with prices of better grades 10 to 15 per cent higher than at the beginning of the year. Sales for the week ended April 27 constituted a record for the Port Elizabeth market. The amount realized for 12,383 pounds was \$172,857, as compared with the previous best record of 11,306½ pounds, sold for \$165,607, during the week ended April 8, 1911. There is no indication of any immediate depression in the market, as all offerings are readily sold at good prices.

Wool Prices.

At the catalogue wool sales in the produce exchange 326 lots, comprising 3,420 bales, were offered, of which 903 bales were sold. Good light wools were in fair demand, but faulty lots, which comprised most of those unsold, were not desired. Prices of snow whites ranged from 29½ to 39½ cents and for greasy wools from 6 to 15 cents per pound. The market for mohair is very quiet, with more offerings than the demand requires.

NOTES FROM ARGENTINA.

[From Consul General R. M. Bartleman, Buenos Aires, values being stated in United States currency.]

New Ships—Matches—Subway Opening.

A newspaper dispatch from Vienna announces that the Austro-American Navigation Co. will devote \$5,075,000 to the construction of new vessels for its South American service.

It has been the local custom to furnish matches gratis with each purchase of cigarettes, but it has been decided by the retail tobacco and cigar dealers to abolish this practice.

The contractors of the tube tram line are about two months ahead of contract time, and it is believed the opening of the first section will take place at the beginning of August.

Dairy Products—American Stamps—Crude Oil.

During 1911 there were imported into Argentina 4,919,437 kilos [kilo = 2.2046 pounds] of cheese, 351,651 kilos of condensed milk, and 188,455 kilos of malted milk; and there were exported during the same year only 518 kilos of cheese.

Numerous manufacturers and individuals in the United States are sending to Argentina stamped addressed envelopes to be used in forwarding the replies to their letters. This is wasted expenditure, as American stamps can not be used in mailing letters in this Republic.

During 1911 there were imported into Argentina 61,223,261 kilos of crude petroleum, with an estimated value of \$5,909,009. The previous year the imports amounted to 39,478,583 kilos, valued at \$3,809,682.

Wool Shipments—Women's Professional School.

In the six months from October 1, 1911, to March 31, 1912, 238,445 bales of wool were exported from Argentina and 58,410 bales from Uruguay, of which 25,295 bales of the former and 3,462 bales of the latter were shipped to the United States. In the corresponding six months of 1910-11 total shipments from Argentina aggregated 303,159 bales, and from Uruguay 55,869 bales. [A review of the Uruguayan wool clip appeared in Daily Consular and Trade Reports on May 6, 1912.]

Recent executive decrees have dealt with the courses of study to be pursued in the Escuela Profesional de Artes y Oficios de Mujeres (Women's Professional Arts and Crafts School). Among the branches included in the curriculum are arithmetic, Spanish, Argentine history, natural history, domestic economy, housekeeping, care of the sick, first aid, care and education of children, etiquette, social duties, home account keeping, physical culture and gymnastics, sewing and dress-making, lace making, millinery, making of artificial fruits and flowers, telegraphy, painting and drawing, lettering and designing of carpets, illustrations, diplomas, etc., photography, glove making, embroidery, bookbinding, cooking, and laundry work. [A copy of the decree, in Spanish, will be loaned to those interested by the Bureau of Manufactures.]

Coal Imports and Deposits.

Coal imports during 1911 amounted to 3,717,026 tons, with an estimated value of \$25,108,508, as against 3,326,355 tons, value \$22,469,531, for the previous year.

One of the large coaling companies in Buenos Aires stated in April that its stock of this product was exhausted and that no more was expected until toward the end of that month, when Pennsylvania coal would arrive. Coal was then \$18 to \$20 gold a ton in Buenos Aires.

At Curilehu, near Chosmalal, at San Martin de los Andes, Covunco, and Picun Leufu, on the Neuquen, there is said to be coal in considerable quantities and superior to Cardiff coal. The question of transportation arises in connection with the development of these deposits. The new line of the Southern Railway will tap these fields. It will also tap the petroleum and tuff districts. Tuff, or tufft, is a volcanic rock of great strength and durability, waterproof and light, and a useful building stone.

What the United States Purchases from Argentina.

Including \$22,895 worth of returned American goods, the exports to the United States declared through the consulate in Buenos Aires, for the quarter-year ended March 31, 1912, were valued at \$8,353,387; Porto Rico took \$25,478 worth additional, making a total of \$8,378,865, in comparison with \$8,044,140 during the corresponding three months of 1911. Exports declared at the Rosario consulate during the first quarter of the present year are reported as amounting to \$1,989,872, and at the Santa Fe agency \$159,116; making Argentina's total sales to the United States direct \$10,527,853. The principal articles in the cargoes invoiced at Buenos Aires were: Bones, \$89,372; dried blood, \$10,879; casein, \$66,037; casings, \$62,588; fertilizer, \$50,624; ostrich feathers, \$15,194; fossils, \$17,401; cattle hides—dry, \$1,628,525, salted, \$2,012,919; horsehides, \$46,348; hair (animal), \$95,596; linseed, \$501,682; quebracho—wood, \$14,861, extract \$234,052; calfskins, \$393,278; goatskins, \$296,009; sheepskins, \$175,434; stearin, \$29,639; wool, \$2,572,441.

Argentine Time-Tables.

In view of the increased number of American travelers including Buenos Aires and Valparaiso in their itineraries, various time-tables (in Spanish) are transmitted which may be found of interest; also time-tables and schedules showing the accessibility of the Falls of the Iguaçu. [These will be loaned by the Bureau of Manufactures.]

NEW GOVERNMENT PUBLICATIONS.

[Announcement of Bureau of Mines.]

Bulletin 36: Alaskan coal problems, by W. L. Fisher. 1912. 32 pp. 1 pl.

Technical Paper 12: The behavior of nitroglycerin when heated. 1912. 14 pp. 1 pl.

Technical Paper 13: Gas analysis as an aid in fighting mine fires. 1912. 16 pp.

Technical Paper 16: The deterioration and spontaneous combustion of coal in storage. 1912. 14 pp.

Miners' Circular 6: Permissible explosives tested prior to January 1, 1912, and precautions to be observed in their use. 1912. 20 pp.

Bulletin 37: Comparative tests of run-of-mine and briquetted coal on locomotives, including torpedo-boat tests and some foreign specifications for briquetted fuel. Reprint of United States Geological Survey Bulletin 363. 58 pp. 4 pls.

The Bureau of Mines has copies of these publications for free distribution, but can not give more than one copy of the same bulletin to one person. Requests for all papers can not be granted without satisfactory reason. In asking for publications please order them by number and title. Applications should be addressed to the Director of the Bureau of Mines, Washington, D. C.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8956. Tobacco and cigarette machinery.**—An American consular officer reports that the managers of the tobacco monopoly in the country in which he is located recently stated that the business was highly successful. However, they plan further improvement on behalf of the skilled laborers employed and in the introduction of the latest technical inventions which are calculated to reduce the cost of production. Those interested in this matter should communicate at once with an official whose name is given in the report.
- No. 8957. Cutlery, hardware, glassware, and stationery.**—A business firm in India has written to an American consulate that it would like to be placed in communication with American exporters or manufacturers of cutlery, hardware, glassware, and stationery who are interested in pushing the sale of their goods in that market. No references are furnished.
- No. 8958. Soda fountains, fruits, sirups, etc.**—A report from an American consular officer in a Latin-American country states that a firm in his district is of the opinion that there are no soda fountains in use there, but that the installation of one would be a paying proposition. This firm would like to install one, and manufacturers of soda fountains, fruits, sirups, etc., should communicate with it, sending catalogues, illustrations, price lists, etc. Quotations should be given c. i. f. city of destination, and correspondence may be in English.
- No. 8959. Electric power houses and milling plants.**—Owing to the growing scarcity of fuel in a certain foreign country many mining companies are considering the advisability of establishing electric power plants. The initial move has been made by a prominent local firm which contemplates the establishment of a large power house for supplying power to several mines. As mining is very profitable in this country it is expected that other mining companies will require power plants from time to time within the next year or two. Copy of the complete report on this subject, forwarded by an American consular officer, will be sent to interested firms by the Bureau of Manufactures.
- No. 8960. Machinery and automobiles.**—The Bureau of Manufactures is in receipt of a communication from a member of an American firm stating that he will leave shortly for a business trip through England, France, Germany, and Switzerland. He writes that during this time he will have an excellent opportunity to introduce American products in European countries, as he is well acquainted with the automobile and machinery trade, both of Europe and the United States, and has good foreign connections. He would like to hear from any American manufacturers who desire to establish European connections.
- No. 8961. Dredging.**—The American consul general at Ottawa, Canada, reports that the Department of Public Works has advertised for tenders, to be received until June 13, 1912, for dredging required at Yarmouth, in the Province of Nova Scotia. Combined specification and form of tender can be obtained on application to the secretary of the Department of Public Works, Ottawa. Dredges and tugs not owned and registered in Canada can not be employed in performing this work.
- No. 8962. Cast-iron pipe.**—An American consular officer in a European country reports that an association in his district is in the market for cast-iron pipe, and correspondence regarding the same should be sent to an individual named in the report. Copy of the report, giving the quantities and nature of the supplies required, can be obtained from the Bureau of Manufactures.
- No. 8963. Condensed milk.**—An important commission merchant in France informs an American consular officer that he desires the names of American firms selling condensed milk.
- No. 8964. Ropeway for transporting freight.**—An American consular officer has submitted a report in detail regarding a project to establish in the country in which he is located a ropeway for transporting freight. The cost of this is estimated at \$475,000. American firms interested in this proposition can secure further particulars from the Bureau of Manufactures and should lose no time in looking into the matter.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 676. Tenders for public buildings.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring, and interior lighting fixtures) for the following buildings: (1) Until June 28, 1912, for post office and courthouse at Reidsville, N. C. Extension will be two stories and basement, with a ground area of about 1,470 square feet, of nonfireproof construction, brick-faced, and slate roof. (2) Until June 29, for post office at Austin, Tex. Building is two stories and basement, stone and brick faced, of fireproof construction (except roof), with a ground area of approximately 15,200 square feet. (3) Until July 8, for post office at Portsmouth, Ohio. Extension is to be of one and two stories and basement, of approximately 2,100 square feet ground area, brick-faced, with slate roof, and of nonfireproof construction, except the first floor. (4) Until July 2, for post office and customhouse at Traverse City, Mich. Work contemplated is construction of a one-story basement and attic extension of about 1,900 square feet ground area, fireproof construction, stone and brick facing, and tin roof, and certain remodeling and repairing of the present building. (5) Until July 3, for post office at Billings, Mont. Building is three stories and basement, with a ground area of approximately 7,250 square feet, fireproof construction, stone and brick facing, and tin roof. (6) Until July 9, for post office at Evanston, Ill. Work contemplated is a one-story basement and mezzanine extension of about 3,300 square feet ground area, fireproof construction, stone facing, and tin roof, and certain remodeling and repairs of present building. (7) Until July 10, for post office at Lansing, Mich. Extension is about 38 by 74 feet, two stories and basement, stone-faced, slate roof, fireproof construction. (8) Until June 24, for post office and courthouse at Pittsburgh, Pa. Drawings and specifications covering all these buildings can be obtained from the Supervising Architect, or from the custodians of sites at the various points.
- No. 677. Sand and gravel.**—Sealed proposals for furnishing sand and gravel will be received at the United States Engineer Office, Seattle, Wash., until June 28, 1912. Information on application to J. B. Cavanaugh, Major, Engineers.
- No. 678. Waste paper.**—Sealed proposals for the purchase and removal of waste paper of the Department of the Interior and its several bureaus in Washington during the period from July 1, 1912, to December 31, 1912, will be received until June 11, 1912. The estimated quantity of waste paper for the six months is 300,000 pounds. It is required that the paper be removed weekly from each of the buildings. Blank forms for proposals may be obtained by application to the Secretary of the Interior, Washington, D. C.
- No. 679. Electric push-button lift.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until July 5, 1912, for an electric push-button lift in the United States post office at York, Pa., in accordance with specifications, copy of which may be obtained from the Supervising Architect.
- No. 680. Portland cement.**—Sealed proposals for furnishing 200,000 barrels of Portland cement will be received at the United States Engineer Office, Seattle, Wash., until July 1, 1912. Information on application to J. B. Cavanaugh, Major, Engineers.
- No. 681. Grading, roadway, and wireless ground system.**—Sealed proposals for grading, roadway, and wireless ground system at naval reservation, Arlington, Va., will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until June 22, 1912. Plans and specifications can be obtained on application to the bureau.

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.

ADMINISTRATIVE CHANGES IN CHOSŌN.

[From Vice Consul General Edwin L. Neville, Seoul.]

In the instructions given by the Governor General of Chosŏn (Korea) to the provincial governors at an assembly in Seoul in April reference was made to the recent administrative changes in the Government General, to the civil and criminal ordinances, and to the ordinances relating to immovables. The object of all of these laws is said to be to facilitate the despatch of governmental business, to provide for the people a clear statement of their rights and duties to each other and to the Government, and to establish a means for verification of property rights. The effect is to put into force in Chosŏn, so far as may be, the administrative system in vogue in Japan proper. The provincial authorities were asked to exert their best efforts to spread an understanding of these laws among the people.

The Governor General also urged that State aids for the development of productive enterprises should be used carefully, with special reference to the encouragement of rice and cotton cultivation, cattle breeding, and sericulture. He stated that with proper guidance some 80,000 horsepower for the use of hydroelectric plants could be obtained from the unused watercourses of Chosŏn. New roads are to be built and a new cable laid between Chosŏn and Japan. [Mention of this new cable was made in Daily Consular and Trade Reports on Apr. 13, 1912.] Telephone and telegraph lines will be increased. Railway fares have recently been reduced, and through trains will soon be run between Fusan and Changchun. The governors were urged to make suitable preparation for the increase in travel which is expected to follow these improvements.

From an American standpoint a noteworthy feature of the Chosŏn criminal causes ordinance, which went into effect April 1, 1912 [and a translation of which is filed for public reference in the Bureau of Manufactures], is the granting to police officials of the same powers, so far as search and examination are concerned, as are granted to procurators of local courts. The State, represented by the procurator, has the same right of appeal as a defendant. The ordinance, which is not retroactive, repeals the old Korean criminal law.

American interests will not be affected by these new laws; and it may be stated that one who is at all acquainted with Japanese methods need have no difficulty in Chosŏn.

Canadian Plan for December Lake Freight.

It is announced that the Canadian Minister of the Interior has been in conference with the marine insurance and navigation companies of Toronto with the object of working out a plan for extending the season of navigation to the head of the Lakes. It is proposed to keep the Lakes open during December in future, thereby allowing the shipment of 15,000,000 to 20,000,000 bushels of wheat more than has hitherto been shipped during the season. Additional lighthouses and ice breakers would be required.

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FISH TRADE AND INDUSTRY.

NORWAY.

[From Vice Consul General Haakon E. Dahr, Jr., Christiania.]

Excepting agriculture, the fisheries furnish employment to, and are the principal source of income for, the largest portion of the Norwegian people. They may be broadly classified as local fisheries and fisheries in foreign waters. The local fisheries cover winter and other varieties of cod, herring, sprat, coalfish, halibut, flounders, lobsters, salmon, etc.; also fresh-water fish. The foreign fisheries cover the catch of whales, walrus, seals, etc.

Local Fisheries.

The year 1911 was an exceptionally prosperous year for all people interested in fisheries of any kind. The catch of winter cod was larger than in any season since 1897. The number taken in 1911 is placed at nearly 64,500,000. The output of medicinal cod-liver oil approximated 43,318 barrels. The herring fisheries gave the following large returns: Winter herring, caught during the winter of 1910-11, 220,000 barrels; spring herring, 674,000 barrels; other, 530,000 barrels; total, 1,424,000 barrels. Many of the herring were small and of poor quality, only suitable as material for the herring-oil factories. The prices paid the fishermen varied all the way from 3 crowns (80 cents) and less to 20 crowns (\$5.36) per barrel for the raw product.

The catch of sprats in the Stavanger district alone is placed at 508,000 skjepper (a measure holding about 18 liters or one-half bushel), with a total value of \$380,200 for the raw product. The quality was good as a rule. The price paid to the fishermen fluctuated, the average during the season being about 2.80 crowns (75 cents) per skjepper. Some 35,000 skjepper were prepared as anchovies and the remainder as sardines. It is figured that 80 boxes of sardines may be packed from the contents of 1 skjepper of sprats. The 1911 catch of sprats in the whole Kingdom is estimated at 600,000 skjepper.

The quantity of mackerel salted was 50,247 barrels, nearly all prepared for the United States market. The prices paid the fishermen ranged from 25 to 95 öre (6.7 to 25.5 cents) per kilo (2.2046 pounds).

Foreign Fisheries.

The whale and seal fisheries in 1911 were carried on with more energy than in any previous year, and the profits have been so large that it is difficult to name any industry which has proved more remunerative. Many new whaling companies have been organized during the year. It is easy to obtain loans in the banks for shares in whaling companies, because in some instances dividends of 100 to 150 per cent have been realized. The rich catch in the South Sea regions and the advance sales in 1910 at high prices secured a handsome dividend to the shareholders; and in spite of the great quantity of oil which was brought on the European markets in the spring, prompt oil was not obtainable during the summer of 1911. The official statistics give no exact figures of the amounts received from sales of whale oil, and such data are not easily obtained, for the reason that the larger portion of whale oil and other whale products is disposed of in foreign ports. The total gross returns for the season 1910-11 is variously estimated by statisticians to be \$5,896,000 to \$6,700,000.

The number of limited companies which will fish for whale in 1912 in the South Sea will be about 35, in addition to the 20 existing companies that fish in the northern seas. Two large companies have also been started to fish under the American flag from Alaska, and four or five companies are at present in course of formation. The Norwegian shipyards have been much occupied in building whaling boats, several of the companies having been compelled to contract with foreign shipbuilders.

Whales Plentiful in Southern Waters—Prices.

Whales appear to be most plentiful in the southern seas, around South Georgia, South Shetland, Kerguelen, and on the coasts of South America and Africa. They are evidently decreasing in numbers in the northern seas and the catches there made have been rather light. Some of the more conservative whalers predict that the industry will soon become less profitable in all waters owing to scarcity of whales.

Prices obtained for whale oil were quite satisfactory in the beginning of 1911, at which time No. 1 grade was quoted as follows: Christiania, 11.26 cents per 2.2046 pounds; Glasgow, \$116.80 per long ton; Hamburg, \$11.19 per 220.46 pounds. In the summer and fall prices declined, and in December were, respectively, 9.6 cents, \$97.33, and \$9.52. It is estimated that the world's production of whale oil in 1910 was 600,000 barrels of 375 pounds, and that of this some 344,000 barrels were secured by the Norwegian whalers.

For whalebone the prices were high, quotations per long ton having been: For bone of right whale, \$6,800; finback whale, \$365; inferior quality bone, \$136. Whale guano brought \$4 per 220.46 pounds, and bottlenose oil sold for \$136 to \$160 per long ton.

New Refinery for Whale, Seal, and Fish Oils.

A new Norwegian industry has been established at Christiania for refining whale, seal, and fish oils on the system which is patented and used by the Bremen Besigheimer Oelfabriken, Germany. The Norwegian company is styled De Nordiske Fabriker A. S., with main office at Christiania. The share capital is to be \$804,000, of which the Bremen company receives \$268,000 in free shares as payment for the system and patents. Of the remaining \$536,000, the promoters have subscribed \$398,248. When the balance, \$137,752, was offered for subscription, the amount was oversubscribed at least three times.

A plant is to be built by the German company for account of the Norwegian interests, which the former guarantees to cost not more than \$241,200. The German company further guarantees the output of the works and the quality of the product, but reserves for itself the right to nominate one-half of the members of the board of directors and representatives.

[A comprehensive review of Norwegian whaling methods was published in Daily Consular and Trade Reports on Feb. 19, 1907, and a more recent article appeared in the issue of Mar. 25, 1912.]

[From Consul P. Emerson Taylor, Stavanger.]

Importance of Fishing Industry to Norway.

While the Stavanger consular district preserves and exports about five-sixths of all the canned fish products shipped from the entire Kingdom, other parts of Norway are more largely interested in catching the fish. The following table, showing the catch of the chief commercial fish for the entire Kingdom in 1909 and 1910 and for the Stavanger district in 1910, has been compiled from recently published official statistics:

Kinds of fish.	Quantity.			Value.		
	Kingdom of Norway.		Stavanger district.	Kingdom of Norway.		Stavanger district.
	1909	1910	1910	1909	1910	1910
Cod.....number..	56,207,800	55,335,200	140,000	\$4,802,030	\$5,056,431	\$12,186
Herring and sprats...barrels..	2,841,094	2,803,216	503,448	2,643,977	4,227,395	634,892
Mackerel.....number..	14,931,163	15,308,238	1,994,133	373,592	447,292	56,548
Coalfish and ling.....				2,982,469	2,853,812	108,835
Salmon and trout.....pounds..	1,870,086	1,490,449	111,813	223,770	273,083	21,494
Lobsters.....number..	1,249,533	901,084	187,374	307,664	248,758	54,082
Oysters.....				2,760	2,734	589

The number of persons engaged in fishing as a vocation throughout the Kingdom who are registered and insured under the fishermen's insurance law was 89,925 in 1910. Of these, 5,709 were from the Stavanger district. Ninety women, 37 of whom were from this district, are included in the total, which may be further classified as follows: Sea fishermen, 66,536; fiord fishermen, 21,834; whalers, 1,555. The corresponding figures for the Stavanger district were 2,462, 3,225, and 22. There are in the entire Kingdom 183 steamers engaged in fishing, of which 22 are in the Stavanger district. There are several thousand sailers, motor boats, and small rowboats used in the fisheries.

Market for American Motors and Motor Boats.

Because of the financial and commercial interest of the Stavanger district in the catching of fish, there is a constant opportunity in this city and the other towns of the district for the sale of American motors and motor boats. Reports have been made from this consulate a number of times on the opportunity for American motors in this market. (See Daily Consular and Trade Reports of Apr. 9, 1910, and May 19, 1911.)

The indications are that manufacturers in the United States are becoming alive to the fact that the market is an attractive and lucrative one for American dealers, for there has been a very marked

increase during the past year in the sales of American marine motors. One firm alone in this city reports the sale of several motors each month during the year. Some local agents keep American motors regularly in stock and are able to demonstrate them to prospective buyers. [A list of Stavanger dealers in marine motors is obtainable from the Bureau of Manufactures.] If American firms handling other lines of goods, especially machinery, would realize what the dealers in marine motors have evidently realized, namely, that it is not good business policy to attempt to transact their Stavanger business through a general agency in Hamburg or Copenhagen, they would meet with better success in entering this market.

The firms in this city handling American motors without the intervention of a European general agency all report most favorably upon this direct representation, and the steadily increasing sale of the motors shows most satisfactory results. There has on the other hand been much dissatisfaction, and many complicated mistakes have occurred, through the practice of those American firms which insist that all their Norwegian purchasers must buy goods through a Hamburg or Copenhagen general agency.

SWEDEN.

[From Consul Stuart J. Fuller, Gottenborg.]

The fisheries of the Gottenborg district are important. Their operations extend not only along the coasts and out to sea but also to the lakes and rivers. The residents of Bohus County are regarded as among the most skillful of the northern fishermen. Herring is the most important fish, but the catch also includes cod, haddock, mackerel, plaice, whiting, sole, brill, halibut, eels, lobster, salmon, oysters, and shrimps. Herring is exported fresh to England and Germany in the winter. Salt mackerel, anchovies (spiced small herrings), and some dried fish are exported to the United States.

The estimated total value of the catch for the season ended March 31, 1911, and the preceding six seasons was as follows: 1910-11, \$2,351,122; 1909-10, \$2,004,419; 1908-9, \$1,978,615; 1907-8, \$1,554,342; 1906-7, \$2,103,770; 1905-6, \$1,468,053; 1904-5, \$1,266,626.

The business was greatly benefited by the opening of the fishermen's sales harbor at Gottenborg in 1910. Auctions are held at this harbor at stated intervals and buyers attend from all over Sweden and various parts of northern Europe. It has been found necessary to extend the facilities of the harbor basin. The Gottenborg experiment has proved such a success that in 1911 the Riksdag appropriated nearly \$750,000 for the construction of 24 others in small Swedish ports, convenient to the fishing grounds.

The Herring Fisheries.

Exports of salt and fresh herring from Gottenborg for the past four years were:

Years.	Fresh.	Salt.
	<i>Pounds.</i>	<i>Pounds.</i>
1908.....	54,783,700	4,681,936
1909.....	40,257,723	2,778,768
1910.....	28,545,121	5,048,108
1911.....	37,020,304	6,183,537

Declared exports to the United States have been as follows:

Kinds.	1908	1909	1910	1911
Canned.....	\$15,871	\$21,537	\$24,837	\$21,268
Dried.....	1,724	1,485	2,094	1,204
Salt and pickled.....	33,104	205,553	204,492	189,862

Careful study of the fisheries has developed the fact that the herring migrates along fixed lines. There are two periods in the season, the first including September and October, when the fishing is in the Kattegat and is done with drift nets, and the second, when the scene of activity moves to the Skager Rack and North Sea, and seines are used. The drift-net fishing in the fall does not yield large catches, but the quality of the herring is better, as the fish have just spawned and are fat. The number of herring present in a season seems to vary by periods. The period which began with 1876 and has lasted up to date is regarded as a good one despite poor results shown in a few individual years. During the preceding period, from 1810 to 1876, the supply was so very small that no proper herring fishery was possible.

Ships and Men—Government Aid.

The open-sea fishing in the Kattegat and off the Shetland Islands employs over 200 boats with crews that total 1,700 men. The mackerel fishery employs 850 boats and about 5,000 men; 5,000 more are engaged in the herring fishery. It is estimated that between 600 and 800 of the fishing boats are equipped with kerosene motors, mostly of Swedish manufacture. The equipment of the boats with motors began 10 or 12 years ago.

The Swedish Government encourages the fisheries by giving loans to individual fishermen and associations of two or three at low interest and on easy terms to buy boats and motors and improve their equipment and facilities. As a result the industry has escaped the control of corporations and is in the hands of individuals and small groups.

SCOTLAND.

[From Consul E. Haldeman Dennison, Dundee.]

The year 1911 proved a prosperous one for the Aberdeen fishing fleet. The total weight of fish landed was 2,544,471 hundredweight, valued at \$5,217,432, in contrast to 1,934,806 hundredweight (value \$5,012,404) in 1910 and 1,844,418 hundredweight (value \$4,264,483) in 1909. Extensive additions were made to the already large fishing fleet, 24 new vessels having been launched during the year.

Considerable success attended the work of the trawlers in pursuit of herring; in some cases these boats proceeded to Germany to dispose of their catches. Of the Aberdeen fishing fleet, something like 250 vessels operate in the North Sea and off the west coast. Their trips average 8 to 10 days only and they are therefore able to bring in the fish in the very best of condition.

In spite of its remoteness from the large centers of population, Aberdeen, by reason of the excellent quality of its fish, has been able to surmount geographical obstacles, the products of its trawlers finding a ready sale in the southern markets at good prices.

CANADA.

[From Consul General John G. Foster, Ottawa.]

The market value of fish and fish products taken by Canadian fishermen, in both sea and inland fisheries, during the fiscal year ended March 31, 1911, amounted to \$29,965,433, of which the sea fisheries contributed \$26,122,596, and the inland fisheries \$3,842,837. There were employed 1,680 vessels and tugs and 38,977 boats, the whole manned by 68,610 men. On shore in the various canneries and fish houses there were employed 24,978 persons.

The following table shows the estimated value of fisheries products during the fiscal year 1911 in each Province of the Dominion which produced a value of over \$1,000,000, with the increase or decrease compared with the previous year; also the estimated value of the catch of the principal kinds of fish, together with the increase or decrease for each species compared with the fiscal year 1910:

Provinces.	Estimated value.	Increase or decrease.	Kinds of fish.	Estimated value.	Increase or decrease.
Nova Scotia.....	\$10,119,243	+\$2,038,131	Salmon.....	\$7,206,871	- \$698,653
British Columbia.....	9,163,235	- 1,151,520	Cod.....	5,921,248	+2,008,442
New Brunswick.....	4,134,144	- 542,171	Lobsters.....	3,784,069	+ 126,953
Ontario.....	2,026,121	- 151,662	Herring.....	2,278,842	- 475,909
Quebec.....	1,692,475	- 115,962	Halibut.....	1,251,830	+ 11,353
Manitoba.....	1,302,779	+ 299,394	Haddock.....	1,218,759	+ 389,206
Prince Edward Island....	1,153,708	- 43,849	Whitefish.....	963,594	- 16,532
			Trout.....	825,290	+ 304,167
			Smelts.....	797,066	- 71,776

[For a review of Canada's fisheries in the fiscal year 1910, see Daily Consular and Trade Reports dated May 31, 1911.]

URUGUAY.

[From Consul Frederic W. Goding, Montevideo.]

The existence of both fur and hair seals on the islands and coast of Uruguay has been known for many years, but although numerous computations have been made of each, the number has never been definitely arrived at.

During 1906 an Executive decree, which has all the force of law, made provision for the punishment of persons convicted of unlawfully killing seals and arranged for the immediate sale of the skins captured, provided that, at the trial of the culprits, proof of legal ownership was not established. Formerly the privilege of killing seals was leased to the highest bidder; but on June 15, 1910, an Executive decree was issued transferring the sealing rights to the Direction General of Valuations and Administration of State Property, which office has since operated the business. During the past season 2,997 fur seals and 4,850 ordinary seals were killed, the skins and oil, which were sold in the London market, giving a net profit of nearly \$39,000, yet no young animals were slaughtered. It has been stated that when properly organized the industry will furnish an annual revenue of more than \$70,000.

The punishment given to former poachers has completely stopped their work, so that at present nothing of the kind is done. [Copies of the two decrees referred to above will be loaned by the Bureau of Manufactures.]

CHILE.

[From Consul Alfred A. Winslow, Valparaiso.]

The whaling industry is of growing importance in Chile. The Corral Whaling Co., with headquarters at Corral, gives employment to 200 men, of whom 30 are Norwegians. Two hundred whales is the average annual catch, from which 10,000 barrels of oil are extracted. The largest whale so far caught by this company measured 125 feet and yielded 100 barrels of oil. This company has four fully equipped steamships (flying the Chilean flag), together with a floating factory for use on the high seas and a shore plant for extracting and refining whale oil and converting the refuse bones and flesh into fertilizer, which latter sells for about \$35 United States gold per ton. The average daily wage paid the workmen is \$1.10 gold.

There are two whaling companies operating in Chile, the other being in the Magellan country, and there is talk of others being formed with abundant capital to push the business on a more extensive scale. The output of these two plants for 1911, covering oil, whalebone, and fertilizer, amounted to \$3,893,200.

WHALING IN SOUTHERN SEAS.

[From Consul General R. M. Bartleman, Buenos Aires, Argentina.]

The January number of the *Revista Zootécnica*, published in Buenos Aires, contains an article on whaling, and gives some data sent by the consul general for Argentina in Christiania.

This article shows that the numerous uses which have been created for whale oil and other whale products have led to a very profitable development of the whaling industry; notwithstanding the constantly increasing quantity of oil and whalebone put on the market, the prices continue to rise. A Norwegian whaling company, operating with remarkable success in the Antarctic seas, recently paid dividends equal to 70 to 85 per cent of the capital invested. The demand for whale products is so great that 75 per cent of the catch for 1910 was sold in advance. A catch of one whale a week per vessel is considered very satisfactory. A year's catch of 52 whales yields 160 tons of oil, 10 tons of baleen, and 1,000 tons of bones. The Greenland whale and the Antarctic whale are the most valuable for their whalebone. The blue whale is most interesting for its strenuous resistance to capture.

The harpoon used in whaling is a deadly weapon of marvelous intricacy. It is shot from a cannon, which can be focused with great rapidity at any angle from its pedestal on the specially constructed ship. On penetrating the body of the whale, the point of the harpoon explodes, and its four hooks spread out in the flesh, securely holding the shaft of the harpoon, which ends in a ring carrying a strong cable. Held by this cable, the struggling whale tows the boat after it at a terrific speed until forced by its wounds to succumb. The periodical further states:

The Magallanes Company—Norwegian Enterprises.

In the Magallanes Territory of Chile whaling constitutes a very lucrative business, the *Sociedad Ballenera de Magallanes* having obtained net profits of £32,000 sterling on a capital of £100,000. This company expects to purchase the steamer *Presidente Quintano*, which will make voyages from Buenos Aires to ports of the south to reinforce its fishing fleet. The history of this industry in Magallanes dates from 1902, when

a company was organized to exploit the business of fishing for whales. In 1905 the steamer *Almirante Montt* was specially built for this purpose. In 1906 the Sociedad Ballenera de Magallanes was organized, with a capital, as already stated, of £100,000 (\$486,650). That same year a Mr. Anderson was sent to Europe, and there acquired the steamers *Gobernador Bories*, of 3,000 tons, as a floating depot, large tanks for oil and machinery for handling the whales being installed; the *Almirante Uribe*, of 80 tons, and *Almirante Valenzuela*, of 100 tons; also a sailing vessel, the *Cornelia Jacoba*, of 1,200 tons. From its organization up to 1910 the company has taken 749 whales—right, humpback, finback, blue, and sperm. Its fishing fleet cruises over the south Atlantic and Pacific Oceans, and in the vicinity of the South Shetland Islands. Whales in large numbers are also encountered in the Strait of Magellan and the channels of Tierra del Fuego.

A Christiania newspaper published the following information relative to the Norwegian whale fisheries in 1910: "The year 1910 was the best in the history of the whale fisheries. Not alone was there a vast number of whales caught, but the different products of the fisheries reached the highest price in years. The results of the operations in the vicinity of the island of South Georgia of three Sandefjord (Norway) companies employing four steamers were 1,124 whales, which produced 27,200 barrels of oil. The Ocean Co., of Laurvig, Norway, with two steamers, secured 16,000 barrels of oil. The Condor Co., of Sandefjord, secured 3,800 barrels of oils extracted from the refuse left by other companies. The Tonsberg (Norway) Co. collected 10,800 barrels. This is an aggregate of 57,800 barrels of oil from one island of the southern seas. In South Shetland three companies from Sandefjord, with eight steamers, captured 1,461 whales and extracted 37,500 barrels of oil. Along the coast of Chile, Province of Valdivia, the Sandefjord contingent was able to collect 7,000 barrels; in South and East Africa, 13,000 barrels; in the Kerguelen Islands, where a company from Christiania was also operating, the fishing was not so abundant. To sum up, the three Norwegian villages secured to the end of 1910 the following quantities of oil: Sandefjord, 103,500 barrels; Laurvig, 16,000 barrels; Tonsberg, 10,800 barrels; or a total of 130,300 barrels of oil, without taking into account the other products of the fisheries—whalebone, guano, bones, etc."

[Port Stanley (Falkland Islands) correspondence in Buenos Aires Herald of Mar. 27, 1912; transmitted by Consul General R. M. Bartleman.]

The Catch in the Falklands and Other Islands.

Whaling in southern seas is now in full swing; and considering that whaling companies shipped oil, baleen, and guano to the estimated value of \$3,893,200, the proceeds of the last season's catch only, it may be regarded as a paying industry.

When killed, the whales are towed (sometimes two or three at a time) either to one of the 12 large floating factories or to one of the 7 shore works, where the oil is "tried out." All baleen and bones of any value are set aside; scraps and useless bones are used for fuel. Bones "pay their passage" as dunnage between the barrels or tanks of oil. Auxiliary supplies of coal, shooks or staves for barrels, etc., for the factories afloat and ashore are shipped out by sailing vessels or steamers.

With the extensive and increasing destruction of the present day, whales will soon become extinct. In the Falkland Islands and their dependencies alone more than 8,000 whales were taken last season. Factories at South Georgia sent in returns for 5,000 and plants in the Falklands, South Shetlands, South Orkneys, Graham Land, and South Sandwich Group accounted for approximately 3,000. In the latter places there are about a dozen whaling companies, while in South Georgia alone there are seven such enterprises which employ between them over 1,000 men during the season. That returns of the catch and full particulars are to be supplied to the Government is one of the stipulations of the whaling license.

The 50 swift and powerful whalers owned by these companies are equipped with the most modern implements for catching, towing, and manipulating whales, and the large steam floating factories are fitted up with improved machinery and ingenious apparatus for extracting oil. Early in December the floating factory *Ronald Amundsen*, accompanied by three whale catchers, the *Granat*, *Cannon*, and *Harpun*, arrived at Port Stanley from Norway and later sailed for South Shetland. The other floating factories and their attendant catchers were already at the whaling grounds.

A company in which some stock is held locally is endeavoring to establish a depot on the South African coast.

Tin.—The Dutch Minister for the Colonies authorizes the Netherlands Trading Co. to announce that the 1911-12 Banca tin production has comprised 250,640 piculs.

THE CUBAN SUGAR INDUSTRY.

[From Deputy Consul General H. P. Starrett, Habana.]

The treaty of reciprocity between the United States and the Republic of Cuba, which was negotiated in 1902, allowed a preference of 20 per cent in the duty on Cuban sugar entering the United States. Since that date Cuba has entered upon a period of development that has exceeded the predictions of the most optimistic. Vast new areas of land have been brought under cultivation, new mills have been erected, old mills have been remodeled and improved, and projects are on foot for many additional mills to be built in the near future. So great has been this recent development that it can safely be said that if the present activity continues Cuba will be in a fair way of becoming the largest producer of sugar in the world.

The relations between Cuba and the United States have been so close during the last few years that it is interesting to observe to just what extent American capital has invested in the Cuban sugar industry. A careful estimate of this investment in mills, lands, railroads, and other equipment devoted exclusively to the industry, but not including mortgages, gives a total of \$54,000,000. In this estimate, however, are included a few companies which were organized in the United States and hold charters granted by different States, but whose stock is owned by persons other than Americans. Their investment amounts to a very small percentage of the whole. The distribution of this total investment through the different Provinces of the island is as follows: Pinar del Rio, \$750,000; Habana, \$3,000,000; Matanzas, \$5,750,000; Santa Clara, \$14,500,000; Camaguey, \$4,700,000; and in Oriente, \$25,300,000.

Extent of American Interests.

There are in the island at the present time 173 active mills, of which 34 are wholly American owned and 2 partly controlled by American capital. Another interesting fact is that American-owned mills produce nearly 35 per cent of the total sugar output of Cuba. In Pinar del Rio they produce over 22 per cent; in Habana, 15 per cent; in Matanzas, 14 per cent; in Santa Clara, 26 per cent; in Camaguey, 58 per cent; and in Oriente more than 70 per cent. From this statement it can readily be seen that in the Provinces of Camaguey and Oriente the sugar output was largely from American mills, and, on account of the American mills now building and being planned in those Provinces, these percentages will be increased still further within the next two years. Sugar in western Cuba has about reached the law of diminishing returns in agriculture, but the prediction is that eastern Cuba—Santa Clara, Camaguey, and Oriente Provinces—will continue to develop and expand until restricted by the lack of available land or until some unforeseen disaster overtakes the industry.

The impetus given the industry by the recent high prices and the favorable outlook for a continuance of at least a very remunerative price in the future has drawn the attention of many American capitalists to the profits in this field of endeavor; and in view of this interest it would seem that a brief description of the methods of culture and the cost of production, together with an estimate as to the cost of establishing a complete sugar estate in Cuba, might be of assistance. With this object in view the writer has collected, from planters, engineers, and investors in the industry, data bearing on the

cost of production and the profits to be expected. It must be stated, however, that these figures are only approximate and many factors tend to make them vary, such as the location of the plant, price of labor, and whether European or American machinery is used, but the endeavor has been to be very conservative in the estimate as a whole.

Location and Fertility Factors—First Investment.

In the first place, it can be stated that perhaps the two most important items to be considered are the fertility and adaptability of the land and the accessibility to transportation facilities. Provided that suitable land can be obtained, the ideal location for a modern mill is on or very near a good harbor, where ships can come up to its own dock. It should have its own railroad to carry the cane from the fields to the mill and to transport the sugar from the mill to the dock. This reduces to a minimum the cost of importing machinery and supplies and of shipping the products of the mill.

Let us take as a basis a sugar estate which will produce 100,000 bags of sugar of 320 pounds each per annum. The amount of land for all purposes—fields, roadways, pastures, timber tracts, sites, etc.—should be about 20,000 acres, and good land of this character would cost \$6 to \$10 per acre, according to fertility of the soil and nearness to transportation facilities. The total first investment for such an estate would be about as follows:

20,000 acres of land, at \$10.....	\$200,000
Clearing and planting 5,000 acres, at \$50	250,000
Oxen and carts.....	60,000
Railroad and equipment.....	260,000
Wharf.....	40,000
Sugar mill and house.....	800,000
Office, store, dwellings, hospital, and barracks.....	40,000
Working capital.....	50,000
Total.....	1,700,000

Cultural Methods.

Two general systems of growing the cane are in vogue in Cuba—the “colono” system and the “administration” system. The first contemplates the ownership of the land and equipment by the mill, money being advanced to “colonos” or tenants to grow, cut, and deliver the cane to the company’s railroad, a percentage of the sugar extraction being returned to the tenant in payment for his work. In many instances the “colono” owns his land and equipment, and in such cases the basis of settlement is different only in that the percentage returned to him is larger. These percentages vary according to locality and the number of mills competing for the cane, but it probably averages about 5 per cent of the cane actually delivered to the mill or the company’s railroad. That is, for every 100 arrobas (arroba=25.3664 pounds) of cane delivered to the mill the colono receives 5 arrobas of sugar or the market price for the same.

The second method, that of “administration,” is one in which the company owns the land and either does the whole work through its own employees or lets the different branches of the work out to contractors who perform the work under the supervision of the company’s representatives. One class of contractors cleans the cane rows, another cultivates the crop, another cuts and loads the cane on the cars, etc. This seems to be the preferred method, and this is the one upon which the figures of this report are based.

In Oriente Province the average cost by contract of clearing land, fencing, making roadways, plowing, planting, and cultivating cane to maturity (12 to 14 months from planting) is \$50 an acre. The cane once planted in new and what is considered good sugar land will produce an average crop of 30 tons per acre per annum for a period of 10 years, after which time it would have to be replanted; and the cost of cultivation per year would be about \$15 per acre.

Cost and Profits.

Taking these general figures as a basis, it would be necessary to plant the first year 5,000 acres of cane, which, at an average of 30 tons per acre, would produce 150,000 tons of cane per annum. Allowing a "rendimiento" or sugar extraction from the cane of 10 per cent, would give a production of 96° raw sugar of 15,000 long tons, or 33,600,000 pounds in all. The average net price for Cuban raws f. o. b. Cuba for the past 10 years, but not including the high prices of 1911 and 1912, was 2.25 cents per pound. It must be stated here, however, that the high prices of 1911 and the favorable outlook as to future prices will considerably raise this average. This production of raw sugar would give approximately 1,000,000 gallons of molasses, and the price for which this could be sold would be about 3½ cents per gallon f. o. b. Cuba. Thus the following statement shows the gross annual income to be:

33,600,000 pounds 96° raw sugar, at 2½ cents.....	\$756,000
1,000,000 gallons molasses, at 3½ cents.....	35,000
Total income.....	791,000

In such a mill located near the coast, with no railroad freight to pay on its product and with efficient management, it is safe to say that the cost of producing this amount of sugar, including cultivation, harvesting, transporting the cane to the mill, railroad operation, mill operation, administration, maintenance, depreciation, insurance, taxes, and all other operating expenses, would not exceed \$550,000, or at the rate of 1.6 cents per pound. The difference between the gross income and the total annual cost would therefore be \$241,000, or slightly in excess of 14 per cent on the investment of \$1,700,000.

Some Authorities Claim Still Higher Returns.

This, as has been stated above, is a very conservative estimate of the costs and profits obtained from the operation of a modern sugar mill under favorable conditions in Cuba, as the figures for the total investment and those showing the cost of production are probably higher than they would be under skillful management, while the price received for the products would undoubtedly average slightly higher than the figure given. For instance, if such a mill had sold its product for the high prices which obtained during the latter part of 1911, it would have produced a gross income of over \$1,400,000, or more than 80 per cent on the whole amount invested in the plant. Careful students of the industry claim that on the basis of a period of, say, 10 years, there is no reason why a mill properly located and managed should not produce an average net income of 15 to 20 per cent on the actual investment.

[Articles pertinent to the foregoing report appeared in Daily Consular and Trade Reports on Aug. 31, 1910, and Aug. 1, 1911, while

numerous reviews of Cuban sugar-crop conditions and yield have been published from time to time, among which were those in the issues for Aug. 20, 1910; Jan. 7, Mar. 10, Apr. 5, Sept. 30, Oct. 21, and Nov. 9, 1911; and Feb. 16, 1912.]

HONDURAN BANANAS FOR EUROPEAN MARKET.

[From Consul Claude I. Dawson, Puerto Cortes.]

The first cargo shipment of bananas from Honduras to Europe was dispatched on May 7 from Puerto Cortes by the Hamburg-American liner *Sarnia*, a refrigerator ship of approximately 4,000 tons and 11 knots speed, which is expected to reach Hamburg in about 20 days. It carried 25,000 bunches of bananas and miscellaneous freight. A second sailing is announced for May 31, and it is said the service will be continued indefinitely.

This marks a new epoch in the commercial history of Honduras, and confirms the rumor of an alliance between the Hamburg-American Steamship Co. and the Atlantic Fruit & Steamship Co. for the development of the European banana trade.

Granting the permanency of the service, planters in Honduras will henceforth have a wider market for their fruit and thus be enabled to overcome, to a degree, the losses occasioned by periodic seasons of low prices in the United States, when shipping concerns greatly curtail the number and size of cargoes and consequently leave large quantities of bananas go to waste.

Possible Diverting of American Trade.

On the other hand, the new service, with direct transit to and from the principal German commercial center, suggests encroachments on American trade supremacy on the north coast of Honduras. Although it will probably result in increased importations from Germany, it should not immediately or materially affect the volume of American trade with Honduras, since German imports are only 8 per cent of the total and consist principally of articles offering little competition with American goods of similar class.

The contrary might result, however, should similar service be extended to English and French ports—a most likely development if Honduras continues to realize expectations as a principal source of banana supply. English and French goods—particularly textiles and certain food products and breadstuffs—are popular in this district, and under the stimulus of efficient transportation this trade would doubtless rapidly increase; and this economic advantage would be seconded by special inducements from the steamship companies in order to develop general freight traffic to produce revenue to defray operating expenses of ships.

The principal commercial nations of Europe control about 30 per cent of the import trade with this district, notwithstanding adverse transportation facilities which entail one and sometimes two transshipments. American exporters may well consider whether this proportion would likely be increased to 40 or 50 per cent under more favorable conditions. It should not be difficult, considering the preponderating European mercantile influence in these countries, which always maintains close commercial sympathies with the mother countries, whose efficient export-trade departments are always alert and ready to encourage and assist in every possible diversion of business to themselves.

WORLD'S PRODUCTION OF RAW SILK.

[From Consul Carl Bailey Hurst, Lyon, France, May 10, 1912.]

Provisional statistics have just been issued by the Silk Merchants' Union of Lyon, estimating the production of raw silk throughout the world during the year 1911. These figures are compiled by the union with minute care from original sources and their publication is always awaited with interest in this silk center. The following is the table made public to-day:

Countries.	Pounds.
Western Europe:	
France.....	886, 258
Italy.....	7, 694, 132
Spain.....	194, 007
Austria-Hungary.....	782, 641
Total.....	9, 557, 038
Levant and central Asia:	
Asiatic Turkey—	
Anatolia.....	1, 124, 357
Syria and Cyprus.....	1, 135, 381
Other provinces.....	297, 624
European Turkey—	
Saloniki, Adrianople, etc.....	804, 687
Balkans—Bulgaria, Servia, Roumania.....	429, 902
Greece and Crete.....	143, 300
Caucasus.....	1, 058, 219
Persia and Turkestan.....	1, 212, 542
Total.....	6, 206, 012
Extreme Orient:	
China—	
Exports from Shanghai (including tussahs, yarns, etc.).....	12, 235, 654
Exports from Canton (including shipments to Bombay and India).....	3, 725, 812
Japan—Exports from Yokohama.....	20, 282, 526
East Indies—Exports from Bengal and Cashmere.....	473, 994
Total.....	36, 717, 966
Grand total 1911.....	52, 481, 036
1910.....	54, 002, 227

Exports from Canton for the season 1911–12 cover 11 months instead of 12, following the decision of the committee of silk-exporting firms that, beginning with 1912, the silk seasons should close May 1 instead of June 1. This measure was adopted in order to have the trade records coincide more closely than heretofore with the various annual crops.

[Statistics of the world's raw-silk production in 1910 appeared in Consul Hurst's annual report, published Nov. 15, 1911.]

AMERICAN EXPERT GOES TO CANADA.

A station note from the Washington Agricultural Experiment Station to the Department of Agriculture at Washington, D. C., reports that Prof. W. T. McDonald, professor of animal husbandry at Washington State College and animal husbandman of the station, has resigned to become Live Stock Commissioner of British Columbia, July 1, 1912. Prof. McDonald received his B. S. A. degree from the Ontario Agricultural College in 1903, and M. S. A. from Iowa State College in 1906. He was associate editor of *The Farmer* and manager of the Webb-Shaw Experiment Farm, St. Paul, Minn., 1903–1905; was professor of animal husbandry, Oklahoma Agricultural and Mechanical College, and animal husbandman at Oklahoma station, 1906–1908; since then at Washington in his present position.

CROP REPORT FOR NORTHERN ARGENTINA.

[From Consul Robert T. Crane, Rosario, Apr. 4; supplementing report in Daily Consular and Trade Reports for Apr. 17.]

Wheat received for export at Rosario and Santa Fe up to March 28 amounted to 195,337 metric tons, which is but two-thirds of the amount received during the corresponding period of 1911. This diminution is not, however, due to an inferior crop, but to the lateness with which all the harvests have commenced this season, and to the lack of transportation owing to recent railway strikes, which have affected all crops. The official standard for wheat settlements has been fixed at 76 kilos (167 pounds) per hectoliter (2.83774 bushels), as against 78 kilos (172 pounds) in recent years; a new standard will be established during April for the remainder of the year, and this will probably be 75 or 75½ kilos (165½ or 166½ pounds).

Linsced has been received to the amount of 71,231 metric tons, seven-tenths of that received at this time last year. The proportion of weed seed is heavy.

Only 4,602 metric tons of corn have been received during the first quarter, or only 4 per cent of last year's receipts at this date. The crop is splendid, and will undoubtedly exceed that of any previous year in Argentina. The official estimate of the Federal Department of Agriculture gives the output for this district as 3,927,000 metric tons and for the entire country as 7,515,000. This estimate would appear, however, extremely optimistic, as it is based on a prospective average yield of 39 bushels to the acre. It seems safe to expect a crop somewhat over 5,500,000 tons for the whole country, of which this district will produce some 2,500,000 to 2,750,000 tons.

SALE OF CHAMPAGNE WINE.

[From Consul W. Bardel, Rheims, France.]

The Chamber of Commerce of Rheims-Epernay publishes a report on the trade in champagne wine of the Champagne district from April 1, 1911, to March 31, 1912. The report also contains a comparative statement of the sales of champagne in the same periods for the last six years. An extract of this report, and a transcript from the invoice book of this consulate shows the total trade in champagne wine, as also the sales of champagne to the United States during the same intervals, as follows:

Business year.	Total sales in Champagne district.	Total sales to United States.
	<i>Quart bottles.</i>	<i>Quart bottles.</i>
1906-7.....	33,171,395	4,406,580
1907-8.....	33,734,618	3,724,584
1908-9.....	32,705,338	3,661,812
1909-10.....	39,294,526	5,420,316
1910-11.....	38,584,402	1,951,944
1911-12.....	35,688,114	2,775,624

The sales of champagne wine to the United States from April 1, 1911, to March 31, 1912, are thus shown to have increased considerably over the previous year, but they were still much below the average sales of former years. The decrease is supposed to have been due to higher prices for champagne in France as also with the increase in United States customs duties on sparkling wines.

GREEK FINANCE COMMISSION'S REPORT.

[From American Minister Geo. H. Moses, Athens.]

The Fourteenth Annual Report of the International Finance Commission, covering the Greek calendar year 1911, shows that the total revenue passing through the commission's hands during the twelvemonth was \$11,920,354, itemized as follows: Salt, \$626,462; petroleum, \$974,335; matches, \$375,955; playing cards, \$80,342; cigarette paper, \$577,456; tobacco, \$1,445,956; stamped paper, \$2,379,702; Naxos emery mines, \$202,215; Piræus customhouse, \$5,257,931. This compares with a total of \$11,228,065 for the previous year and shows an increase of revenue from salt, matches, stamped paper, and customs. Petroleum, playing cards, and Naxos emery show a slight diminution; while cigarette paper and tobacco remain stationary at the point guaranteed by the Greek Government by the law of 1909, whereby these items were transferred from the commission to governmental control. The largest gains were in stamped paper and Piræus customs receipts, being \$283,342 and \$425,462, respectively.

As a result of the year's operations the commission was enabled to devote \$751,352 to the increase of interest payments to bondholders and \$618,530 to the increase of the sinking fund. The expense of the commission was \$46,610, and the surplus turned over to the national treasury was \$5,943,729, or \$1,215,714 more than in 1910.

The rate of exchange throughout the year was practically at par, varying from 99.61 in January to 100.16 in April. The mean exchange for the year was 99.936.

[A summary of the commission's report for 1910 was published in Daily Consular and Trade Reports on June 13, 1911.]

A NEW GOVERNMENT YEARBOOK.

[Review by Superintendent of Documents, Government Printing Office.]

The eighteenth number of that standard annual, the 1911 Yearbook of the United States Department of Agriculture, is now available, being for sale by the Superintendent of Documents, Washington, D. C., at \$1 a copy.

It is a cloth-bound book of 732 pages, containing 31 special articles by agricultural experts, an appendix of nearly 200 pages carrying a great variety of practical information, 20 text figures, and 67 full-page plates, of which 9 are in colors. The subjects illustrated are birds, fruits, insect pests, forest plantations, molds, yeasts, irrigation, crop-destroying crawfish, foresting, canning in factories, July snow scenes in the mountains, a new respiratory calorimeter, etc.

The Superintendent of Documents has learned through his extensive correspondence with citizens who are interested in United States public documents that many suppose this yearbook to be a collection of bulletins and circulars previously published in separate form. This is an erroneous supposition. The entire contents of the yearbook are prepared especially for it and have not been previously published in any form. They are subsequently republished in a series known as "yearbook separates;" that is, each of the special articles is printed in a separate small pamphlet, so that those who wish some one article can be supplied without sending them the whole book. This is an economy and may almost be said to be a necessity, because the allotment of yearbooks to the Department of Agriculture is sufficient to supply copies to only a small part of the citizens in all parts of the country to whom the department is under obligation for information and assistance of various kinds. Being unable to supply complete yearbooks to all its volunteer helpers, the "separates" are made to serve as a more or less acceptable substitute. The "separates" are also on sale by the Superintendent of Documents at 5 cents each.

Though the 1911 edition of the yearbook is not published till 1912, its statistical records are as nearly as possible brought up to the time of going to press.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

No. 8965. Kerosene engines.—An American consul in the Far East reports that a local firm has requested to be placed in connection with American manufacturers and exporters of kerosene engines suitable for running light machinery. This firm wishes to know the full particulars as to the f. o. b. prices of the engines in the United States, less trade discounts; also cost of running the engine and such other information as will serve to give it enough data to make purchases if it should so decide. It should be distinctly understood that it is useless to address this firm in regard to gas or gasoline engines, as kerosene is the only practical power in the country in question.

No. 8966. Steel plant and shipbuilding machinery.—According to the report of an American consular officer the next few years will see a great revival of the shipbuilding industry in the country in which he is located, and there is every indication at present that determined efforts will be made to put new life into this industry. The consular officer would like to have as soon as possible catalogues of machinery for steel plants and shipbuilding. The machinery eventually needed in these plants will be such as reduce iron ore by electricity and in shipbuilding machinery that will equip ships for oil fuel.

No. 8967. Machinery, tools, and hardware.—A new hardware store has been opened in a South American country, and the proprietor has informed an American consulate that he will limit his stock to goods of American manufacture. He is desirous of receiving catalogues from hardware houses in the United States. He intends to make a specialty of the following goods: Carpenters' hand tools, hand-power machinery, mechanics' tools, builders' hardware, furniture and woodwork ornaments, trunk manufacture, etc. He is anxious to get into touch with the manufacturers or exporters of these articles as soon as possible. Correspondence may be in English or Spanish.

No. 8968. Sheet iron, garden tools, wire, and wire nails.—The manager of a foreign business firm has requested an American consulate to secure catalogues and prices of galvanized and plain corrugated sheet iron, spades, and shovels, with and without handles, hoes, with and without handles, barb wire, and wire nails.

No. 8969. Representation in Germany.—The Bureau of Manufactures is in receipt of a communication from an American mining engineer, stating that he is experienced in European business methods and desires to act as buying or selling representative in Germany. American exporters or importers of ores, metals, mining machinery, and engineering appliances can obtain direct representation. References are furnished.

No. 8970. Automobiles.—An American consul reports that a firm of bankers and general merchants is contemplating the resumption of an automobile service between two points in his district, a distance of 5 miles. The firm considers the undertaking a profitable one and is now seeking a suitable car for the work. The car must be of simple construction and geared in such a way as to take the many severe grades encountered between the two points. The high cost of gasoline in that part of the world should be kept in mind also by prospective bidders. Copy of the complete report, containing further details, will be sent to interested firms by the Bureau of Manufactures.

No. 8971. Boat.—The Deputy Minister of the Naval Service, Ottawa, Canada, invites tenders for a steamer for fishery protection service (coal or oil fuel; if latter, heavy Diesel engines of the two-cycle reversible type, capable of using Texas or other heavy oil). Particulars may be obtained of G. H. Desbarats.

No. 8972. Floating crane.—The Tender Board, Adelaide, Australia, will receive tenders for one 50-ton floating crane. Particulars may be obtained of the Agent General for South Australia, 28 Bishopsgate, London, E. C., England.

No. 8973. Railways.—The Public Works Department, Madrid, Spain, will receive tenders until July 1 for the construction and exploitation of railway from Priego to Fernan Nunez.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

Washington, Tuesday, June 11, 1912

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NORWEGIAN DAIRY INDUSTRY.

[From Consul P. Emerson Taylor, Stavanger.]

Next to the canning and preserving of fish and fish products, dairying has become the chief industry of the Stavanger consular district, there being 35 dairies here. Only six of these are operated by individuals or partnerships, the remainder being stock companies, most of which are organized on the cooperative plan.

A few of the cooperative dairies have leased their plants to private individuals or firms, which make a three-year contract with the dairy company to pay a fixed price during that time for all milk delivered, and, in addition, to pay 8 per cent net on the cost of the plant or the amount of capital invested.

There were formerly several ordinary stock-company dairies in this city, but they have now consolidated into one constituting the largest dairy in the district. The plan of organization and operation of this company is largely followed by the others in the district and is as follows: The capital stock is 175,000 crowns (\$46,900), divided into 3,500 shares of 50 crowns each. The stock is all owned by the farmers, each being entitled to as many shares as he has milk cows. Stock may be paid for either in cash or 6 crowns (\$1.61) per share per year until it is all paid. Those paying cash receive 5 per cent interest on the amount of their stock besides the dividends. The shareholders have no legal liability beyond the amount of their stock.

Dividends—Inspection and Instruction.

The payment of dividends is not based upon the capitalization nor the number of shares held by each stockholder, but upon the quantity of milk delivered. Thus, while these payments are called dividends, they are more properly premium payments for the milk delivered. This is the plan followed by the Stavanger dairy, which is by far the largest in the district, and by most of the smaller ones.

There is no official Government inspection, but each of the larger dairies has its own inspector whose duty it is to make periodical examinations of the milk sold, the manner in which the cows are cared

for and fed, the sanitary conditions and cleanliness of barns and yards, the methods of handling and delivering the milk, and to instruct the farmers upon all these matters. These inspections are careful and scientific, and the instruction given to the farmers is of great assistance to them in keeping the quality of the milk up to the highest standard as well as increasing the quantity and butter-producing qualities of the milk.

The largest dairy in the district still buys milk merely by the kilo (2.2046 pounds), while a few purchase it by the liter (1.057 quarts), but a number of the smaller dairies now pay for the milk upon the percentage of butter produced. An effort is being made to have this method of payment adopted generally, as its tendency is to elevate the standard of the milk and dairy products, as well as to promote the raising of thoroughbred cows. At present nearly all the cows of the district are of common breed.

There is a dairy school in the district supported by the Government, where instruction is given. This has also tended to institute more successful and scientific methods of dairying and has raised the standard of quality for butter and cheese. The dairy school affords an entirely separate course of instruction from those offered by the Government agricultural schools of the district.

Regulation of Quotations—Disposition and Consumption of Milk.

The dairies are entirely separate and distinct and there are no general agreements to pay a uniform price to the farmers for milk. Prices therefore differ, but the variation is only slight. The dairy products, however, are generally all sold at a uniform price. A committee of five members elected by the Christiania Board of Trade publishes daily a schedule of prices for various commodities, including dairy products. The local dairies use this for fixing the prices of the milk, cream, butter, and cheese sold by them.

The largest dairy in the district sells more than half of its milk supply at retail for family use throughout the city. It has 25 retail stores. The remainder of the milk is used for butter and cheese. This dairy in 1911 made a little over 88,000 pounds of butter and about 2,200,000 pounds of cheese. It purchased 21,049,600 pounds of milk in 1911 and 19,976,000 pounds in 1910, but in 1911 returned to the farmers about 11,000,000 pounds of skimmed milk at a nominal price.

The amount of milk consumed by all the dairies of the district in 1910 was 66,357,060 pounds, for which the farmers were paid the sum of \$822,406. Nearly complete returns from the 35 dairies of the district in 1911 indicate that about 74,320,000 pounds of milk were consumed by them during that year.

The second largest dairy in the district sold 2,532,200 pounds of milk in 1911 to the dry-milk factory at Time (Norway) for the manufacture of milk meal.

Prices—Prosperity of Industry.

The average price paid to the farmers for milk was 2.8 cents per kilo. The skimmed milk is generally used by the dairies in the manufacture of various kinds of cheese, but during the warmer weather of the summer they are unable to use it all, and large quantities are sold back to the farmers at 2 öre per liter (about $\frac{1}{2}$ cent per quart). The dairies keep no hogs for the consumption of skimmed or sour

milk, and the only by-products manufactured are the various cheeses. A casein factory is being built, and this will in the future take a considerable portion of such products.

The prices at which the butter and cheese were sold during the year varied with the seasons, but the average prices per kilo for the year were as follows: Butter, 59 cents; Dutch clove cheese, 10.7 cents; Gauda (cream) cheese, 18.7 cents; Fad cheese, 16 cents. These are the figures at which the dairies sell to the retail traders and merchants, the prices to the public being about 25 per cent higher than these quotations.

The dairies of the district are all in prosperous condition, and four new ones were built in 1911. From the manner in which they are organized and operated it is difficult to ascertain the exact net dividends they could pay upon their capital stock were all the profits devoted to the payment of dividends. At present improvements in the plants, the installation of more modern machinery, and the division of the profits on the basis of premium prices for milk delivered absorb the profits of the larger establishments. The increase in the dairy industry has meant additional prosperity for the farmers. It is also resulting in the breeding of better stock, in a tendency to more scientific farming in other ways in which the Government has taken a leading hand, and has made the raising of feed crops and of stock the chief feature of farming in this district.

Opportunity for American Goods.

The steady growth of the dairy industry has opened up a market for several kinds of American machinery. There has been for three years an increasing trade in various kinds of silo machines, feed cutters, mowing machines, and other farm machinery used in harvesting hay, which is much the most important crop of the district. There have also been a number of inquiries at this consulate regarding more modern dairy appliances, and an opportunity is offered American manufacturers of this class of machinery. The growth of the dairies has also increased the sales of stationary engines.

The dairies are usually under the management of farmers and farmers' sons who have taken a regular course of instruction in the dairy school and are equipped with information and some experience in handling up-to-date dairy machinery. The Government, in the establishment of the dairy school and in experimental dairying at this and the agricultural schools, has been of the greatest aid in bringing about scientific dairying, and most of the establishments are supplying their plants with approved modern dairy equipment as rapidly as their growing profits will permit.

As a great part of the output of the dairies in both butter and cheese is consumed locally and large quantities are sent to Christiania, the total output can not be accurately ascertained. The city of Stavanger in 1911 exported to foreign countries 899,490 pounds of butter and 55,462 pounds of cheese. [A list of the principal dairies in the Stavanger district is obtainable from the Bureau of Manufactures.]

Sicilian essential oils.—In the report on market fluctuations of Sicilian essential oils that appeared in the April 9 issue of Daily Consular and Trade Reports Consul Arthur Garrels requests that the word "quality" (p. 114, line 23) be read "quantity."

BRITISH MARKET FOR FARM SUPPLIES.

[From Consul Rufus Fleming, Edinburgh, Scotland.]

Government Aid to Small Farmers.

In the small landholders (Scotland) act of Parliament, which became operative on April 1 last, constituting (1) a board of agriculture for Scotland, and (2) a Scottish land court, each with distinct powers to facilitate the creation of new agricultural holdings, an attempt has been made to provide for as great an increase in the number of landholders (tenants) as conditions in this country will permit. The expression "small holding" means any holding which either does not exceed 50 acres, or if exceeding 50 acres is of a rental value as entered in the valuation roll not exceeding £50 (\$243) a year.

The board of agriculture is authorized to arrange with landowners in any and every district where a demand for small holdings exists to meet this demand, so far as landowners themselves do not meet it by leasing small tracts to applicants on satisfactory terms. Failing agreement, suitable land in each district may be compulsorily made available for the registration of new holders, upon payment of compensation for surface damage, etc., on conditions set forth in the act, and at a rental to be fixed by the land court. Only those persons can be registered as landholders whose applications are approved by this court. The Board of Agriculture has power to provide assistance to landholders for dividing, fencing, or otherwise preparing or adapting the land, making occupation roads, or executing other works, such as drainage or water supply, or erecting or adapting a dwelling house or dwelling houses or other buildings, by way of loan or by way of gift, as circumstances may warrant, to be paid out of an agriculture (Scotland) fund, which is an annual grant by Parliament, not to exceed £200,000 (\$973,300). The land court has full authority to determine practically all matters arising between landowners and the board of agriculture as to (1) the land to be taken for new holdings, (2) the rent for such new holdings, and (3) whatever else may be necessary for the purpose of making the scheme effective and of adjusting the rights of all parties interested in or affected by the proceedings. Permanence of tenure is secured to the small landholder and also the right to bequeath his tenancy.

Immediate Results Secured—Implements Needed.

Since April 1 upward of 3,000 applications for registration as small landholders have been received by the Board of Agriculture. It is too early to forecast the results of the new method of dividing landed estates into a greater number of separate farms; but the probability is that within a few years the number of tenant farmers in Scotland will be largely increased. The effect upon farm supply trades is a subject of interest to manufacturers of and dealers in agricultural machines and implements, dairy goods, poultry supplies, etc.

The writer is informed that the small-holdings act of 1908, applying to England and Wales, similar in terms to the small landholders' (Scotland) act—except that its provisions are carried into effect by county councils instead of by the Board of Agriculture as in Scotland—and which has resulted in the acquirement of tenancies of land by about 15,800 applicants in four years, occupying 161,000 acres, has noticeably increased the demand in several English counties for

1-horse plows and cultivators and such hand implements as forks, rakes, spades, etc. It is expected that a gradual enlargement of the market for these implements and other farm supplies in Scotland also will result from the operation of the new act. The agricultural cooperative movement has made much headway during the last three or four years in districts where there are many small farms, and with the increase of these small holdings this movement will continue to develop. It is thought that the cooperative purchase of supplies of all kinds will bring about a considerable expansion of the volume of trade, though the margin of profit will be narrowed and some middlemen eliminated.

[A copy of the small landholders' (Scotland) act of 1911 may be seen at the Bureau of Manufactures in Washington.]

DANISH FLOUR-MILL INDUSTRY.

[From Consul General E. D. Winslow, Copenhagen.]

There were 37 large flour mills in operation in Denmark in 1911, against 38 in 1910. The amounts of grain that have been ground in these large establishments during the last five years are as follows:

Year.	Wheat.	Rye.	Barley.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
1907.....	5,468,467	3,060,748	240,106
1908.....	5,169,267	2,960,066	200,750
1909.....	4,929,833	2,985,714	175,083
1910.....	4,785,733	3,091,785	220,916
1911.....	4,520,267	3,117,321	246,583

The falling off in the amount of wheat ground is said to be due to the unfavorable conditions in Denmark for the flour-mill industry.

According to statistics received from 32 smaller establishments, the grinding of wheat has practically ceased in these mills; the grinding of rye, however, has been increasing, namely, from 314,286 bushels in 1910 to 349,643 bushels in 1911, while barley has decreased from 141,666 bushels in 1910 to 116,666 bushels in 1911.

INTERNATIONAL COMMERCIAL ARBITRATION.

[From the London Times; supplementing statement in Consul General Griffiths' report in Daily Consular and Trade Reports for June 6.]

The British Secretary of State for Foreign Affairs, in replying to a resolution passed by the Association of Chambers of Commerce at its recent annual meeting, expressing satisfaction with the action of His Majesty's Government in taking steps to bring about conventions with foreign and colonial Governments, under which commercial arbitration awards should be made enforceable in all countries entering into these conventions, states that His Majesty's Government is at present in communication with the Governments of the British self-governing dominions in pursuance of the resolution of last year's imperial conference with a view to seeing to what extent and under what conditions it is practical and desirable to make mutual arrangements with a view to the enforcement in one part of the Empire of judgments and orders of the courts of justice in another part.

The Foreign Office concludes with the explanation that, "while the establishment within the Empire of an arrangement of the character indicated is likely to prove a useful step toward a wider application of the principle of recognition of judgments and orders of court, including the question of the appointment of arbitrators, His Majesty's Government deem it desirable to defer the question of negotiating conventions with foreign countries on the subject until after the completion of such an arrangement with the Governments of the self-governing dominions."

FRENCH DECENNIAL PROPERTY VALUATION.

[From Consul Louis Goldschmidt, Nantes.]

The results of the decennial valuation of buildings in France show that in the fiscal year 1909-10 there were, outside of public buildings, monuments, etc., 9,475,786 houses and 137,676 workshops and factories in the Republic.

In 15 Departments the number of such structures exceeded 150,000, as follows: Nord, 467,305; Pas-de-Calais, 246,619; Gironde, 239,262; Seine (Paris), 227,328; Seine-Inferieure, 194,404; Seine-et-Oise, 184,231; Loire-Inferieure, 169,312; Charente-Inferieure, 168,052; Somme, 166,029; Cotes-du-Nord, 161,512; Ile-et-Vilaine, 159,065; Puy-de-Dome, 157,198; Aisne, 156,147; Maine-et-Loire, 154,985; and Manche, 150,699. In 68 Departments the houses, workshops, etc., numbered between 50,000 and 150,000; and 4 Departments had less than 50,000 such buildings—Basses-Alpes, 44,143; Lozere, 35,902; Hautes-Alpes, 31,666; and Belfort, 13,097.

The rental value of these 9,613,462 structures is given in the returns as 3,672,142,128 francs (\$708,723,431). The rental value in the Department of the Seine, which includes Paris, is 1,206,851,213 francs (\$232,922,284), practically one-third of the total rental value for the whole of France.

Real Values—Gains—Advancing Rents.

The real value of all structures in the Republic, exclusive of public buildings, monuments, etc., is given as 64,798,641,000 francs (\$12,506,137,713), the Department of the Seine accounting for 18,000,000,000 francs (\$3,474,000,000) of this valuation, Nord for 2,000,000,000 francs (\$386,000,000), and Seine-et-Oise and Rhone for 1,000,000,000 francs (\$193,000,000) each. In 23 Departments the real value was between 500,000,000 and 1,000,000,000 francs; between 100,000,000 and 500,000,000 francs in 53 others; and below 100,000,000 francs in Basses-Alpes, Hautes-Alpes, and Lozere.

Compared with the 1900-1901 returns, the valuation made in 1910-11 shows the following increases: Number of structures, 310,854 (3.34 per cent); rental value, 500,000,000 francs (\$96,500,000—15.7 per cent); real value, 7,680,698,000 francs (\$1,482,374,714—13.45 per cent). This gain is significant of the general prosperity of the country during the last 10 years, and is also due to the creation of new factories, railroads, etc., and to the impetus of summer and winter resorts and watering places. On the other hand, to these causes is also due the general rise of rents. An increase of 3.13 per cent is noted in 1910 as compared with 1900, and these figures are no longer accurate, as rents have been steadily advancing since 1910. According to the figures for that year, in the following Departments, the increase was: Alpes-Maritimes, 14.24 per cent (due to the development of winter resorts along the Riviera); Meurthe-et-Moselle, 8.93 per cent; and Savoie, 6.31 per cent (due to the industrial development of these two Departments). However, in 14 Departments the cost of rents has for a time decreased owing to temporary economic conditions, such as bad wine crop, etc.

Canadian customs revenue for May was roundly \$9,000,000, the largest monthly collection ever made. It is estimated that for Canada's present fiscal year, which began April 1, the customs collections will exceed \$100,000,000.

RAW-COTTON IMPORTS OF AUSTRIA-HUNGARY.

[From Consul General Chas. Danby, Vienna.]

Austria-Hungary imported in 1911 raw cotton to the amount of 425,950,000 pounds, or about 850,000 bales of 500 pounds each, from the following countries:

	Pounds.
United States.....	246,850,000
British India.....	97,900,000
Germany.....	46,400,000
Egypt.....	27,100,000
Asiatic Turkey.....	7,700,000
Total quantity.....	425,950,000
Total value.....	\$60,694,700

Of this quantity the domestic factories consumed about 800,000 bales, 10,000 bales were reexported, chiefly to Germany and Italy, and the balance is in stock or in course of manufacture. The lowest price of raw cotton during the year was 4.92 pence, the highest 7.32.

The American Trade.

The shipments from the United States formed 58 per cent of the above total import. The demand for American cotton for the year 1912 is estimated at 600,000 to 700,000 bales, if the year proves normal. The American cotton supplied to the Austrian market comes from all cotton-producing areas of the United States. The sales to the Austrian buyers are made almost entirely by resident brokers representing firms in Philadelphia and elsewhere. The routes of shipment are both through German ports and through the Mediterranean, destination, whether Hungary or Austria, seeming to be the determining factor in choice of port of landing. As to the methods of handling this trade, there is no fault to be found with the credits and payments nor with the transportation; the packing, however, is severely criticized.

One matter which urgently demands attention is imposing, if possible, full responsibility on the railroads for bills of lading issued by them covering cotton shipments. It is worthy of remark that the Austrian spinners have had seriously in mind for some time the purchase of cotton plantations in America to grow their own fiber. This project had a setback in 1911 through lower prices for American cotton toward the end of the year. The Austro-Hungarian cotton-spinning industry is, however, in strong hands, and the trade will not hesitate to grow its own cotton should alleged manipulation of American prices and unsatisfactory packing engender a lack of confidence.

AMERICAN SECURES AUSTRALIAN CAPITAL PRIZE.

[European press dispatch from Melbourne.]

The following prizes have been awarded for designs for the Federal capital site: The first, of the value of £1,750 (\$8,516), was awarded to Mr. Walter Burley Griffin, Steinway Hall, Chicago; the second, £750 (\$3,650), to M. Eliel Saarinen, Helsingfors, Finland; the third, £500 (\$2,433), to Alfred Agache, 11, Rue Eugene Flachat, Paris. The awards were made on the recommendation of a majority of two out of three judges.

[The complete topographic drawings, perspectives, etc., of the proposed capital site were forwarded by American consuls in Australia, and supplied by the Bureau of Manufactures at Washington to architects and designers in the United States.]

BRITISH COOPERATIVE WHOLESALE SOCIETIES.

[From Consul General John L. Griffiths, London.]

An evidence of the increasing prosperity of the cooperative wholesale societies in the United Kingdom is shown by the totals of the last three months of 1911 as compared with the same period in 1906 and 1910. With the exception of the Scottish productive departments, in which there was a decrease of 3.2 per cent, and of the Scottish distributive departments, in which the sales remained practically stationary, very considerable gains were made, the largest percentage of increase appearing in the Irish distributive departments.

During the five years from 1906 to 1911 the rate of increase was far greater in the productive than in the distributive department, the relative figures being 33.2 per cent of the former, as against 22 per cent for the latter, while the gain in five years, taking the departments together, was 24.1 per cent.

The wholesale societies have realized for some time past the necessity of possessing or controlling productive departments, and as a result, in the case of the English section, there was a gain in the five years ending with December 31, 1911, of 42.9 per cent in the productive department as compared with 24.3 per cent in the distributive departments.

In the following table are shown the sales of the wholesale societies of the United Kingdom for the fourth quarter of 1911, with the percentage of increase or decrease as between 1910 and 1911, and also between 1906 and 1911:

Societies and nature of business.	Sales in fourth quarter of 1911. ¹	Percentage of increase compared with—	
		One year ago.	Five years ago.
English wholesale society:			
Distributive departments.....	\$38,795,670	8.9	24.3
Productive departments.....	8,797,644	4.7	42.9
Scottish wholesale society:			
Distributive departments.....	10,506,603	.....	13.7
Productive departments.....	3,519,647	3.2	14.4
English and Scottish wholesale societies' joint committee:			
Productive departments.....	266,037	4.2	24.5
Irish agricultural wholesale society:			
Distributive departments ²	79,275	20.4	288.9
Totals:			
Distributive departments.....	49,381,548	6.9	22.0
Productive departments.....	12,583,328	2.3	33.2
Total.....	61,964,876	5.9	24.1

¹ The amounts given for the productive departments represent sales and transfers to distributive departments.

² Decrease.

³ This society has no productive departments.

INTERNATIONAL AERIAL NAVIGATION.

[Reuter dispatch from Brussels, May 22.]

The International Commission on Aeronautical Legislation has drawn up a proposed treaty regulating international aerial traffic. This draft convention will be submitted to the International Conference, which will meet in Vienna in June. The questions which have not yet been solved, notably those relating to customs dues and to payments for damage done by air craft, will come up for discussion again at the next meeting of the commission.

BANKING FACILITIES FOR BRITISH FARMERS.

(From Consul General John L. Griffiths, London.)

Among the many suggestions for improving agricultural conditions in the United Kingdom the one most frequently made and favorably received deals with the necessity of providing improved banking facilities for farmers.

The president of the Board of Agriculture has effected an arrangement between some of the leading joint-stock banks and the local credit societies whereby farmers may obtain advances upon their own character of securities. Many bills have been introduced into Parliament for establishing land banks, but none have passed. The president of the board of agriculture believes that the best plan is to induce joint-stock banks to make advances to local credit societies through which the farmers largely make their financial arrangements. The Board of Agriculture has prevailed upon six of the largest joint-stock banks in the United Kingdom to "accept credit societies' accounts on terms as to the period of the advance, security, and rate of interest, which will give credit societies as good a chance in this country as they have abroad."

Present Limitations of Loans.

There are 44 agricultural cooperative credit societies in England and Wales. The first of these was organized in 1895 at a village in Lincolnshire of about 1,000 inhabitants. Deposits are received by the society at 3 per cent interest. Interest on loans is charged at 5 per cent per annum, and during the past 16 years 78 loans have been effected in sums ranging from \$24 to \$243, the latter amount being the maximum of a loan which is permitted by the friendly societies act.

The money is not indiscriminately loaned since the amount received by the borrower must be expended on some specific object which is approved by the committee of the agricultural credit society. It is ordinarily provided that the loan shall become due at the time when it is thought that the profits of the transaction which the loan is to promote will be realized. The financial position of this especial society is stated to be in every respect satisfactory. No loans are overdue. The average annual expenses are exceedingly small and a fair profit has been obtained. There are 32 members of the society and the average land holding is less than 50 acres. The board of agriculture regards the operations of this credit society as so satisfactory that it has published an account thereof with the hope, doubtless, that similar societies may be formed to a greater extent than heretofore throughout the United Kingdom.

India's Barley Exports Increasing.

Barley exports from India to Europe are greatly increasing. For the fiscal year ended March 31, 1912, they reached 292,418 tons worth \$7,450,000, against 13,345 tons worth \$330,000 the year previous. A British barley buyer visiting India suggests that "an effort be made to establish the system practiced in the great barley-producing sections of California, where the grain is bagged and placed in railway warehouses against a warehouse receipt which may be hypothecated to a bank against loans."

AGRICULTURAL PARCEL POST.

[From Consul Edwin N. Gunsaulus, Johannesburg, South Africa.]

The publication in the February 16 issue of Daily Consular and Trade Reports of an article from this consulate entitled "Farm produce by parcel post," has prompted inquiries from the United States for still further data on this subject, there being a desire for detailed information as to just what success the agricultural parcel post has attained in South Africa.

A request was made of the Department of Posts and Telegraphs of the Union of South Africa for such additional information as could be supplied relative to the subject, and in compliance with this request a letter has been received from the acting postmaster general, setting forth the experience of the post-office administration in connection with the introduction throughout the Union of South Africa of the agricultural parcel post. The information therein contained is here quoted:

Prior to the date of Union, the post was called in the Transvaal the "agricultural parcel post" and in Natal the "produce post." In the Cape Colony and the Orange Free State it had not been introduced.

It is now described as the "agricultural parcel post," but nevertheless all products of the Union, such as gold, diamonds, minerals, wool, ostrich feathers, saddlery and boots and shoes manufactured from leather produced in the Union, confectionery, fruit, plants, seeds, and eatables and drinkables the product of the country, are allowed to pass.

Articles That May be Sent.

The interpretation as to what articles can pass is necessarily a wide one. Boots, shoes, and saddlery have imported rivets and eyelets in their production; confectionery has imported flavorings; and medicines and drinkables generally have to be fortified with ingredients that are not produced in the country. Provided, however, the imported additions represent but a small percentage of the marketable articles the latter circulate at the agricultural rate.

Liquids, butter, eggs, and fruits which easily liquify have to be packed in boxes filled with absorbent material. Nevertheless as agricultural parcels are inclosed in bags with ordinary mail matter in the majority of instances, occasional cases occur of breakages resulting in damage to other contents. In a country like the Union of South Africa where there are no less than 1,445 cart, horse, and native-runner mail routes it is impracticable to make up agricultural parcels in separate boxes or baskets excepting between the larger centers.

That the producer and consumer have been brought together through the introduction of the agricultural post is beyond question. The post is largely availed of and is increasing in bulk.

Accompanying this report is a copy of a pamphlet issued by the Department of Posts and Telegraphs detailing the methods and objects of the agricultural parcel post, which is now a recognized and popular feature of the post-office system of the Union of South Africa. [The pamphlet referred to will be loaned to interested persons by the Bureau of Manufactures.]

Incubators for Ostriches and Alligators.

Incubators for hatching ostriches and alligators might be sold in South Africa, reports Consul General Richard Guenther, of Cape Town. The ostrich-rearing industry is conducted on a very large scale, and the consul general adds that conditions are ideal in certain parts of the country for raising alligators, which would prove profitable if there is a market for the skins—already used to some extent for leather novelties.

INCREASING HONGKONG EXPORTS.

[From Consul General George E. Anderson.]

One of the unexpected turns of events in connection with the revolution in China has been that, in spite of disturbance of trade due to the revolutionary movement and notwithstanding the restraining effect of high exchange upon the sale of Chinese goods abroad, the declared exports from Hongkong to the United States during the first quarter of the current year exceeded those for the corresponding period in all recent years. With the exception of the last three months of 1910 the past quarter was the largest of any in the history of the trade. With the immense imports of American flour, which exceeded all imports of such commodity in a similar period, the trade between Hongkong and the United States in both directions was far above the normal.

The total declared exports from Hongkong to the United States during the three months ended March 31, 1912, were valued at \$1,348,161, as compared with \$1,052,699 in the same period of 1911 and \$1,151,530 in 1910. The bulk of these exports consisted of tin, rice, and provisions.

Exports to the Philippines also exceeded those of the same quarter in any previous year, having a declared value of \$1,417,266, compared with \$1,168,287 in 1911. The increase was made up largely of shipments of rice, amounting to \$642,038, against \$513,310 in 1911, and of provisions, which aggregated \$186,160 in contrast to \$32,219 the year before. The change in provisions represents a restoration of the export of lard to its normal volume by the establishing in Hongkong of lard-rendering plants, which meet the requirements of the pure-food laws of the Philippines.

NEW BRITISH VESSELS FOR SOUTH AMERICAN TRADE.

[From Consul Hunter Sharp, Belfast, Ireland.]

Two new vessels were launched at Belfast on May 16 for the South American trade. The *Darro*, 11,200 gross tonnage, has twin screws and is for the intermediate passenger service of the Royal Mail Steam Packet Co. to Brazil, Uruguay, and Argentina. It will carry a large cargo, having holds insulated for chilled or frozen meat, also compartments insulated for dairy produce and fruit. The engines are arranged on the "balanced" principle, so successful in eliminating vibration. The *Vestris*, gross tonnage over 10,000, for the British and South American service of the Liverpool, Brazil, and River Plate Steam Navigation Co. is built on the Isherwood longitudinal system. The cargo space is divided into five spacious holds practically free of obstruction. Some compartments are insulated for chilled meat, fruit, and produce. Twin screws are driven by two sets of quadruple expansion engines, carefully balanced to reduce vibration.

Modern houses in Malaysia.—An Eastern journal announces a concession made by the Government of Selangor to the people of Kuala Lumpur (capital of Federated Malay States) throws open a large area of land, off Batu Road, for building purposes, and assists the people with the necessary capital to put up additional and up-to-date houses, which are badly needed.

FAR EASTERN NEWS.

[From London and China Telegraph; monetary amounts in American currency.]

Shipbuilding.—There are 10 steamers of over 3,000 tons burden in course of construction in Japan at the Kawasaki yard, Kobe, and the Mitsu Bishi yard, Nagasaki.

Chinese gold mines.—Cheung Kwok-hing, who has returned to Canton after being educated in England, announces that he has discovered several gold mines in the Haiping district and in other localities.

Mule purchase.—The Malay States Guides are going to purchase mules for a battery of Mountain Artillery. The mules and their outfit will necessitate an initial outlay of \$18,000 and will cost \$7,000 per annum to upkeep.

Cotton mill.—Wong Fookchung has petitioned the provincial Government at Canton for permission to form a limited company to spin and weave native yarns as a means of checking the exodus of China's wealth to foreign nations.

Office building.—Another addition is to be made to the new buildings on the Bund at Shanghai, the site selected being at the corner of Canton Road presently occupied by Dodwell & Co. The grounds have been successfully negotiated for by the Union Insurance Society of Canton (Ltd.).

Bridge or tunnel.—It appears that two eminent civil engineers are busy comparing the relative merits of a bridge and a tunnel for connecting Shimonoeki with Moji, Japan, and thus establishing railway communication between the two places. [This matter was discussed in Daily Consular and Trade Reports for Nov. 7 and Dec. 15, 1911.]

Korean gold mining.—According to the Seoul Press, Mr. Keiichiro Yasukawa, a Japanese millionaire business man, has been granted the right of working six gold mines in Korea (Chosen), 4,540 acres, in aggregate area, at Sinchang Myon in Changsong district, North Pyongan Province, and seven others, 5,460 acres, in aggregate area, at Chongnan Myon in the same district.

Rebuilding Hankow.—Influential business men in Hankow are negotiating with capitalists of various Powers to raise a \$3,000,000 gold loan for rebuilding the city and constructing an embankment. The contract for the embankment will probably be given to the Okura Gumi. According to the specifications it is to extend 30,000 feet, starting from the foreshore of the English settlement on the Yangtze and running up along the Han River. Six foreign surveyors are mapping out the site of the proposed bridge across the Yangtze. The plan is to run the bridge from the Snake Hill at Wuchang to the Tortoise Hill at Hanyang. The survey is being made at the request of the Peking Government. [The American press reports that Robt. Dollar & Co., of San Francisco, have been given a \$15,000,000 financing contract for the foregoing work in Hankow and for constructing an electric street-car line there.]

Japanese gold mining.—The Jiji Shimpō publishes a long account of a gold mine said to have been discovered along a river some 7 or 8 miles from Hanuzuka Station on the Fukuoka Railway. Recent investigations are said to have showed that one ten-thousandth part of the ore in the vein is pure gold, and it has been estimated by authorities said to be trustworthy that \$1,000,000,000 worth of gold is within easy reach at this place. Applications for mining privileges are pouring into the authorities, and steps have been taken to obtain an official expert opinion.

Japanese capital investments.—The Bank of Japan has issued its annual statistics on the amount of Japanese capital invested in business. In 1911 the total invested was \$180,000,000, as against \$243,000,000 the preceding year. Of this amount \$42,000,000 went into electrical undertakings and \$19,000,000 in gas plants. Looking back on previous years, the report recalls that the record was touched in 1907, when the amount of new capital invested was \$334,000,000. This boom, however, soon collapsed, and a reaction followed. In the lean years of 1908 and 1909 the investments were, respectively, \$62,000,000 and \$63,000,000.

New Japanese industries.—The Nippon Ginko's investigations show the capital involved in economic enterprises newly mooted or for extending established businesses effected during March amount to \$30,000,000, bringing up the total capitalization to \$73,000,000 since January last. Commenting on this, Baron Shibusawa is quoted as saying that the marked increase in the capital invested in manufacturing industries, aquatic products, and mining business is in keeping with the general trend of economic progress. The growth of the electric business is also a natural sequence. Railway, tramway, and shipping enterprises are also welcome, as they tend to accelerate the general economic development. The enormous increase in capital by spinning mills is no doubt due to a marked increase in the demand in the home market, and also the prospective brisk demand for cotton yarns and cloth in China. The increase of capital in commercial and other undertakings amounts to \$18,000,000.

[From North China Daily News.]

Industries in Hupeh.—The Hupeh copper mines in China are being opened. The Portland cement factory at the same place is busy, the half-mile endless wire rope carrying the casks over fields to the godown by the river.

Public building.—The municipal council of Shanghai has decided to appoint a special committee to investigate the whole question of the reconstruction of the central offices on their present site and of the location of a drill hall on that site. It was decided to invite Mr. E. S. Little to join the committee and one other member of the community outside the council.

BRAZILIAN NOTES.

[From Consul Southard P. Warner, Bahia.]

Reduction in Cable Rates from Bahia to Europe.

The Western Telegraph Co. (Ltd.), which maintains the foreign cable service at this port, has announced a reduction of 20 cents per word in its rates from here to European countries. The following are the rates to the countries in question: To Belgium, France, Germany, Great Britain, and Holland, 65 cents; to Switzerland, 70 cents; to Italy, 71 cents; to Denmark and Spain, 72 cents; to Austria-Hungary, 73 cents; to Norway, Sweden, and Portugal, 74 cents; to Russia, 79 cents. The rate of 90 cents per word to New York was unchanged.

Bahia to Have Automobile Fire-Fighting Apparatus.

The municipal authorities of this city have called for bids for the following apparatus for the local fire department: Two automobile fire engines, 2 automobile ladder trucks, 2 automobile hose carriers, and 2 automobile ambulances, all to be fully equipped. The notice calling for these bids was published April 20 and required that the bids be submitted within 60 days, so short a period that American manufacturers are excluded from competing for this order, which will doubtless be given to one of the British or German importing firms located here.

Bids for equipments and supplies of various sorts are quite frequently called for by the State and municipal authorities of Bahia, but as the time for submitting such bids is limited to 60 days in nearly every case, it is practically impossible for any but local importing firms to compete for orders of this nature. American manufacturers are not properly represented here, and for this reason a goodly amount of trade here goes to our commercial rivals without any competition on the part of American manufacturers.

Foreign Trade of Italy.

Consul General James A. Smith, of Genoa, advises that Italian exports for the first four months of the present calendar year reached a total of \$145,224,745, an increase of \$14,948,674 over the corresponding period of the previous year. Imports amounted to \$219,311,903, a decrease over last year of \$7,014,680.

Canadian Bank Charts.

Consul General D. F. Wilber, of Vancouver, learns that the Department of the Interior, at Ottawa, Canada, issues maps of the several Provinces of Canada, showing the location of all the branches of chartered banks in Canada, as well as giving certain data with regard to the banks.

LEVANTINE BUSINESS NOTES.

[From the Near East.]

Roumanian Aerial League—Turkey Buys Aeroplanes.

An Aerial League has been formed at Bucharest for the purpose of purchasing by public subscription aeroplanes for the army. M. Constantine Olanesco, the President of the Chamber of Deputies, is the first president of the league. Aviation is making good progress in Roumania, and several aeroplanes piloted by young officers took part in last year's autumn maneuvers.

The press at Constantinople announces that the Turkish Ministry of War has placed an order for two aeroplanes with a Bristol company at a cost of \$6,500 each. It is also stated that six officers and five engineers will be sent to the makers to study aviation.

Works in Cyprus.

The Cyprus Gazette publishes the text of a bill to authorize the expenditure of \$123,000 on various services, including the purchase of breeding stock, \$7,000; carbonizing plant, \$9,000; machinery and tools for the Forest Department, \$3,250; construction of a lighthouse at Klides Island, \$7,500; improvement of Kyrenia Harbor, \$7,500; construction of a jetty at Limassol, \$5,000; erection of agricultural school, \$6,500; and construction of new bridges, \$7,000.

Cairo Electric Railways.

The report of the Cairo Electric Railways and Heliopolis Oases Co. shows an increase in capital from \$6,000,000 to \$10,000,000, due to the fusion of the company with the Société Française d'Entreprises en Egypte. The revenue of the company has reached \$580,000, and, after writing off ample depreciation, the company shows \$114,000 credit balance. There is a constant demand for the land of the company. There are now 938 buildings erected, and private building schemes are increasing. Heliopolis will one day become a very important town. A mosque has been opened since last year. A Catholic cathedral, the building of which is due to private enterprise, is being proceeded with. There are five schools, at which 300 students attend. On the side of sport, racing is looked after by the Heliopolis Racing Club. Polo, cricket, and tennis are all provided for, and a golf course has been opened. The Luna Park attracted great crowds during the summer season, and the hotels appear to have been crowded.

Large Onion Crop—French Plantation Enterprise.

The Egyptian onion crop constitutes a record, both as regards quantity and quality. The yield is over 2,000,000 sacks and prices are favorable. [A full account of this onion-growing industry and trade appeared in Daily Consular and Trades Reports for June 8, 1911.]

A French company is negotiating the acquisition of vast domains in Egypt. It is said that the property of Messrs. Cattani & figli in the Gharbia, consisting of 1,500 acres, will be purchased for \$425,000.

Lower Suez Canal Rates—Dividends.

The directors of the Suez Canal Co. state that they have decided to reduce their tariff to shipowners, as from the commencement of next year, from 6.75 francs (\$1.30) to 6.227 francs (\$1.20) per ton.

At a board meeting of the Suez Canal Co., held in Paris, it was decided to propose to the general meeting of shareholders on June 3 to fix the distribution of the revenue of 1911 as follows: Per capital share, gross 179,559 francs (franc=\$0.193) net 165 francs; per action de jouissance, gross 154,559 francs, net 141,869 francs; per Founders' share, gross 87,075 francs, net 80,707 francs.

Tramway Line for Smyrna.

Representatives of the British European Trust have concluded a convention by which they have obtained from the Imperial Ottoman Government a concession to construct a system of tramways in and about the city of Smyrna. Negotiations are also taking place for the acquisition of telephone and power concessions for the same city.

Bulgarian Loan for Railway Construction, etc.

M. Teodoroff, the Bulgarian Minister of Finance, will shortly leave Sofia for Vienna and Paris. It is stated that the object of his journey is to enter into negotiations for the conclusion of a loan of \$40,000,000, of which \$16,000,000 would be applied to the conversion of the 6 per cent 1892 loan and the rest to the construction of railways and other purposes.

Railway Connections Between Turkey and Bulgaria.

It is stated by the Constantinople Press that the protocol concerning the uniting of the Turko-Bulgarian railway lines at Kustendje [noted in Daily Consular and Trade Reports for May 14, 1912] has been submitted for final approval, and the Compagnie des Chemins de Fers Orientaux will immediately begin work on the Komanovo-Bulgarian frontier branch.

Egyptian Delta Railway Extension.

In order to facilitate the transport of material for Lord Kitchener's Delta drainage scheme [described in Daily Consular and Trade Reports for June 4, 1912] the Delta Light Railways have been commissioned to extend their line from Bielah, in the Mudirieh of Gharbia, in a northeasterly direction, past Abou Badawi, on the Bahr Tireh, and Kafr el Sharki to Salahib, and from thence to Khassa, where a powerful pumping station is to be erected. The line will then be extended to the village of Baltim, on the western shores of Lake Borollos, 50 miles from Bielah. No time is being lost in constructing the line, the route to be followed having already been surveyed, and material having been collected or cabled for from England.

The Merkaz of Borollos, which the new line will serve, comprises some 40,000 acres and has a population of over 20,000. Apart from the great convenience it will be to the drainage scheme, the line will serve to develop this district and encourage the growth of a large fish, vegetable, and date traffic.

CONSULAR FEES FOR DEPOSITIONS.

The attention of the Department of State has been called by consular officers to the fact that they are frequently in receipt of requests from legal firms in the United States to take depositions for them, but the necessary amount to pay for fees, services, etc., is sometimes not included with the instructions. Unless these expenses are guaranteed by the party from whom the deposition is taken it has been the practice of consular officers to inform the inquirers and ask for a remittance before proceeding in the matter. Since this necessarily involves considerable delay, it seems desirable that the attention of the public be called to the following list of the official fees in this connection, namely:

For taking depositions, executing commissions or letters rogatory, where the record of testimony, including caption and certificate, does not exceed 500 words.....	\$10. 00
For each additional 100 words or fraction thereof.....	. 50

The foregoing fee shall cover the administration of the oath and all services of the consul as commissioner, but shall not include services of clerk, stenographer, or typewriter, which shall be additional at the rate prescribed herein (in Tariff of Fees) for copying.

THE LOBSTER SEASON EXTENDED.

[From Consul General James W. Ragsdale, Halifax, Nova Scotia.]

The lobster season in the western part of the Province, from Yarmouth to Halifax, has been extended for 10 days from June 1, the date on which the season would end. This is in response to strong petitions from the western district, and is ordered because of storms in the early part of the season and losses by the fishermen. This extension, under these circumstances, will be a great boon to the lobster fishermen to the west. Halifax Harbor is the eastern limit of the western district.

Freight rates.—The German shipping companies have removed the extra 10 per cent added to freights recently as an equivalent for the high coal prices in connection with the coal strike, but only to the Brazils, River Plate, and to the Far East.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8974. Irrigation machinery.**—An American consul has forwarded a report regarding irrigation machinery for land owned by a resident of his district. The area to be irrigated will be 3,000 to 3,500 acres, and the height to which water will be lifted will be 26 to 39 feet. The volume of water to be raised will be 127,000 cubic feet per hour. Windmills might be used to advantage in this undertaking, and information is desired regarding American windmills for this purpose. Information showing the comparative cost of kerosene engines and windmills is also desired. Further particulars regarding the undertaking can be obtained from the Bureau of Manufactures.
- No. 8975. Incandescent lamps.**—A report from an American consular officer states that a European municipality is in the market for about 3,000 incandescent lamps. Specifications, etc., can be obtained by writing to a person named in the report.
- No. 8976. Machine tools for iron and steel plants.**—A business man in a Mediterranean country informs an American consular officer that he desires to communicate with American manufacturers of machine tools of all kinds for iron and steel working, with a view to representing them on that market. He states that he is in a position to furnish satisfactory references and requests that catalogues, prices, and terms be sent to him. Correspondence in English, French, Italian, or Spanish.
- No. 8977. Artesian well machinery.**—An American consul has submitted a report regarding the introduction of artesian well machinery in his district. This proposition, if successfully handled by an American firm, will mean many orders in the near future for artesian well machinery. It is particularly desirable that the matter be taken up by American houses at the earliest possible moment, as the work must be completed within a certain period. Copy of the complete report, giving detailed information regarding the undertaking, will be sent to interested firms by the Bureau of Manufactures.
- No. 8978. Cement.**—According to the report of an American consular officer, certain foreign Government railways are in the market for 2,000 sacks of cement to be used at one of its stations. Specifications and further particulars can be obtained from an official whose name will be furnished by the Bureau of Manufactures.
- No. 8979. Post-office equipment.**—A new building is being constructed by a European Government for its Department of Post and Telegraphs, and an American consul writes that there should be an opportunity for American manufacturers to furnish part of the equipment which will be needed. The authorities are well disposed toward American post-office equipment, and already use stamp-canceling machines of American manufacture. It might be well for manufacturers to send descriptive matter to the official in charge of this matter.
- No. 8980. Soap, oils, chemicals, etc.**—An American consular officer reports that the War Department of the country in which he is located is asking for quotations on certain quantities of Solway soda, elain oil, sulphate of soda, cleaning soap, sulphuric acid, acetic acid, chromate of potash, lubricating oil, spirit of sal ammoniac, petroleum, cylinder oil, white waste, and glue. Further particulars from the Bureau of Manufactures.
- No. 8981. Wood fiber, cotton tubing, and machinery.**—Inquiries have been received at an American consulate for prices, f. o. b. New York or Boston, on wood fiber, in lots of 10 tons. The inquirer believes he can dispose of 50 to 75 tons per annum, if prices quoted can meet German competition. Inquiries have also been received for particulars and f. o. b. prices on wood-fiber machinery, while information is desired regarding the cost of cotton tubing. Samples of the wood fiber and cotton tubing referred to accompanied the report and will be loaned to interested firms by the Bureau of Manufactures.
- No. 8982. Cottonseed-oil cake, linseed cake, and gluten.**—A business man in France informs an American consular officer that he desires the exclusive agency of American exporters of cottonseed-oil cake, linseed cake, and gluten made from corn.

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COMMERCE OF CHINESE PORTS.

AMOY.

[By Consul Julean H. Arnold.]

Centuries of contact with foreign people through trading have made the Amoy natives acquainted with conditions in near-by foreign lands and the greater opportunities for acquiring wealth which these countries afford have drawn hundreds of thousands of emigrants.

In the southern colonies Chinese have become important factors in commercial and economic development. However, they do not, as a rule, make permanent homes abroad, and are obliged to make remittances from time to time, many of them also returning sooner or later to live here. The amount of money brought into Amoy through these two channels is estimated as far in excess of \$7,000,000 annually, which is the difference between the imports and exports, and the Amoy man is said to possess a higher purchasing power than the Chinese in any other part of China. Some estimates place the amount of money sent and brought here annually from abroad as high as \$20,000,000.

Paper and Tobacco Trade—Exports to the United States.

While the total trade for 1911 is above the general average for the last 10 years, it is below the returns for 1910. This is said to be due to the revolution. About one-fourth of the exports consisted of native manufactured paper made of bamboo pulp. This paper is shipped to the Chinese abroad, most of it going to those in the southern colonies and Formosa. One-sixth of the exports was made up of tobacco leaf, which also goes to Chinese abroad. The Formosa tobacco monopoly contracts for large quantities each year and in the vicinity of Siokhe, in the interior of this Province, a large two-story building has been erected by Japanese capital, to which the tobacco leaves are brought, assorted, and packed for shipment to Formosa.

Narcissus bulbs are the only articles of export to the United States declared through this consulate. About 3,000,000 of these bulbs go to the American market annually, the declared value in 1910 being \$10,514, and in 1911, \$7,043. The only other item in the declared exports in 1911 was household effects to the value of \$181.

Import and Export Trade of the Port.

The following is a list of the principal exports and both native and foreign imports of Amoy in 1910 and 1911:

Articles.	1910		1911	
	Quantity.	Value.	Quantity.	Value.
EXPORTS.				
Bags, hemp.....pieces..	134,768	\$4,386	272,482	\$8,612
Bamboo and bamboo ware.....		23,560		21,973
Beans.....pounds..	234,000	3,071	14,363,200	188,515
Bricks and tiles.....pieces..	2,014,260	14,336	1,940,885	13,763
Camphor.....pounds..	1,733	546	2,367	715
China ware.....do..	1,358,133	23,910	1,365,967	24,580
Fruits, dried and preserved.....do..	2,750,206	123,335	581,467	23,182
Grass cloth.....do..	36,533	10,961	23,467	15,089
Joss sticks.....do..	123,733	12,764	132,400	13,649
Paper.....do..	5,164,133	474,708	5,410,000	545,163
Provisions and vegetables.....		27,496		6,337
Tea, oolong.....pounds..	282,400	23,636	637,600	76,479
Tobacco, leaf.....do..	2,780,206	107,624	5,612,800	386,483
Vermicelli.....do..	1,926,400	45,151	2,194,800	52,101
Parcels, by post.....		125		4,254
Unenumerated articles.....		1,120,252		957,576
Total.....		2,025,661		2,338,471
Reexports.....		359,561		395,527
Grand total.....		2,385,222		2,733,998
IMPORTS.				
Bean cake.....pounds..	84,269,333	828,478	92,305,733	908,634
Beans.....do..	76,073,100	773,286	79,689,733	840,584
Bêche de mer.....do..	662,700	61,661	802,667	56,970
Clothing.....		15,512		18,946
Cotton goods:				
Drills.....pieces..	2,348	6,581	2,167	6,710
Flannels.....do..	7,658	17,213	6,481	10,208
Italians.....do..	16,223	51,001	10,097	34,078
Lastings.....do..	19,349	72,140	15,043	31,024
Prints.....do..	16,289	24,535	12,098	19,281
Shirts.....do..	88,303	202,498	85,820	172,705
T cloth.....do..	46,351	72,513	46,021	63,456
Thread.....gross..	16,974	21,854	11,498	16,169
Other.....		34,764		86,510
Cotton yarns:				
Foreign.....pounds..	4,475,266	581,264	3,491,333	397,787
Native.....do..	2,004,400	186,035	1,789,333	188,715
Cotton, raw.....do..	350,599	33,517	337,200	25,762
Fish, dried and salted.....do..	9,289,066	410,998	6,884,800	354,476
Flour:				
Native.....do..	16,884,266	260,629	4,061,600	61,912
Foreign.....do..	10,435,733	172,044	28,472,933	473,539
Ginseng.....do..	18,393	101,287	18,579	98,459
Machinery and fittings.....		39,718		10,081
Matches.....gross..	679,500	105,161	708,965	123,895
Medicines:				
Foreign.....		130,150		62,401
Native.....		41,373		26,719
Oil, kerosene:				
American.....gallons..	1,195,470	93,246	1,644,889	167,561
Borneo.....do..	1,238,500	114,716	1,075,286	73,926
Sumatra.....do..	785,860	76,299	1,062,982	83,774
Oil, bean.....pounds..	483,466	17,341	339,067	12,157
Opium.....do..	584,125	4,172,588	338,559	2,430,561
Paper.....do..		11,306		13,469
Rice:				
Foreign.....do..	64,250,900	1,040,869	102,509,600	1,297,273
Native.....do..	14,466,666	183,094	21,500,000	272,110
Silk and silk goods.....		114,031		1,201
Sugar.....pounds..	8,508,533	219,990	6,811,734	178,460
Tea (Formosa for reexport).....do..	190,133	23,631		
Vermicelli.....do..	1,387,866	57,248	1,100,933	45,881
Wheat.....do..	2,342,983	20,538	63,467	594
Woolen goods.....		70,257		52,871
All other articles.....		1,529,805		1,701,507
Total foreign imports.....		8,043,384		7,517,427
Total native imports.....		3,945,087		2,902,459
Grand total.....		11,989,071		10,419,886

During the past 10 years the imports into Amoy from foreign countries have averaged in value about \$7,000,000 annually. Since 1902 these imports have been, as a rule, decreasing, though there has been an increase in the imports of native goods. Both departments of trade showed a decrease over 1910 on account of the revolution.

Exports to the Philippines.

The declared exports to the Philippine Islands were as follows:

Articles.	1910	1911	Articles.	1910	1911
China ware.....	\$2,252	\$787	Tea.....	\$6,167	\$1,506
Fish nets.....	7,665	3,286	Vermicelli.....	1,074	240
Grass cloth.....	0,852	3,873	All other articles.....	25,592	10,869
Hemp string.....	1,251	149			
Iron ware.....	1,077	486	Total.....	58,877	25,225
Paper.....	6,947	4,029			

Conditions in Opium Trade—Short Rice Crop.

Although opium has for many years occupied the first place among foreign imports, yet the figures during the past few years are higher than would have obtained under normal conditions, because of heavy speculation in the drug in anticipation of the absolute prohibition of its further importation. At the end of the year the prohibition of the importation of all non-Indian opium became operative, and December 31, 1913, is set as the last day upon which the importation of Indian opium will be permitted. The price of a chest of opium which was \$400 five years ago was \$1,400 in January, 1911, and in August, 1911, rose to \$2,350. By December 31 it dropped to \$1,750, because of the fact that large quantities of Persian opium, which had to be released from bond before January 1, 1912, were thrown on the market. Taking advantage of the disordered state of political affairs, the farmers in this district have planted large areas in opium poppies.

Next in value after opium are the imports of rice. The local rice crop, which ordinarily is not sufficient to supply local consumption, was below that of normal years. Prices throughout the Orient during 1911 far exceeded those of any other year during the past decade. This section of China generally receives heavy supplies from Saigon, but owing to the short crop there, because of which exportation was prohibited, most of the supply came from Rangoon. During the year the local authorities prohibited the exportation of rice from this district, and this stopped speculation. The high price of rice opened the way for the importation of large quantities of American flour, which finds a ready market here when rice is dear and native flour is not easily obtainable.

Cotton Goods Imports—Increased Flour Imports.

The revolution and high price of cotton are partially responsible for the decrease in the imports of cotton goods as compared with 1910. The receipts of native cotton yarn from Shanghai suffered also because watered cotton had been used in its manufacture. The bulk of the foreign cotton yarn comes from Bombay. The only item of the cotton goods trade in which the United States was interested was shirtings, about 10 per cent of which came from the United States via Hongkong.

The cheap cotton prints, lastings, italians, and flannels imported in 1911 came from Germany, Great Britain, Japan, and France.

Of all the foreign imports, flour showed the greatest increase, 150,000 barrels being imported as compared with one-third of that amount in 1910. American flour sold here at 14 cents less per 49-pound bag as compared with 1910. The unprecedented dearth of rice throughout the Orient, with consequent high prices, the floods and famines throughout the wheat-raising areas of central China, the revolution, more favorable exchange rates, and lower flour prices in America all combined to increase the imports of American flour in this port, as well as throughout China, to the highest figures known in the trade.

Increase in Shipments of American Kerosene.

Another item of American imports which shows a substantial increase is kerosene. The Standard Oil Co. reports a gain of nearly 1,000,000 gallons for 1911 over 1910 and states that, had it not been for the revolution, the year's showing would have been even more creditable. The customs figures show an increase of but 450,000 gallons, but this is undoubtedly due to the fact that certain shipments received at the end of the year were not entered in the customs until the beginning of 1912.

Thus more than 50 per cent of the kerosene imported into Amoy during 1911 came from the United States. The Texas Oil Co. entered the market with an importation of 284,000 gallons.

Fish, Sugar, Tin, and Other Imports.

Most of the salted and dried fish came from Japan, although perhaps one-fourth was brought from the United States. This is a trade which should receive greater attention from the American dealers on the Pacific coast.

The trade in sugar for 1911 suffered on account of the higher prices. All of the refined sugar consumed here is manufactured in Hongkong, while most of the ordinary white sugar is brought from Java. The higher price of foreign sugar has been an incentive to the local industry, and considerably larger quantities of cane were grown in this district in 1911. Many small modern sugar mills have been erected, representing an outlay of several hundred thousands of dollars.

The tin used here comes from the Federated Malay States and is mainly used in making kerosene cans and tea lead. Practically all the matches imported were from Japan. The consumption of ginseng here continues unabated. The higher the purchasing power of the Chinese, the greater the quantity of ginseng consumed, as its use is confined almost wholly to the wealthier classes. The entire trade is handled through Hongkong dealers, and the United States supplies about 80 per cent of the total amount consumed.

Foreign Medicines, Clothing, Wines, Lamps, etc.

Imports of foreign medicines, especially proprietary, have increased enormously in the past 10 years. The whole country is being covered with the advertising matter of foreign patent medicine firms, and their wares are finding a tremendous sale among people who have not yet learned to distinguish between the good and bad in this line. The market for ordinary foreign medicines, chemicals, surgical instruments, etc., is also growing rapidly. Recently a representative of a

large American wholesale drug house said that the orders he secured in this consular district far exceeded his expectations. Numerous native hospitals and medical schools are bound to spring up in China during the next 10 years, and these will require surgical instruments, drugs, and chemicals.

The revolution witnessed a remarkable change of attitude on the part of the Chinese of this port, as well as most parts of China, toward things foreign. In South China ports a Chinese with a queue is rapidly becoming a rarity. Foreign hats are now more common than Chinese hats, and foreign clothing and shoes are becoming very popular. There should be a splendid market throughout China for second-hand foreign clothing and cheap foreign hats, shoes, underclothing, and other articles of men's wearing apparel. The Japanese are profiting most by the sudden demand for foreign clothing, and are shipping enormous quantities into China. Chinese tailors are booked for months ahead with orders for foreign clothing, and there is also a big demand for buttons, thread, sewing machines, and tailors' implements.

The amount of beer, wines, etc., consumed in China will increase with the favorable attitude toward things foreign. With the continued war against opium, the smoking of cigarettes is also becoming more general, and the British-American Tobacco Co.'s trade has increased greatly.

There is a good market here for cheap lamps and lamp fixtures and the demand will increase. A native glass factory in Amoy, capitalized at \$5,000, supplies the native trade throughout south Fukien with cheap lamp chimneys.

Demand for Machinery, Condensed Milk, and Canned Goods.

The imports of machinery and fittings vary greatly from year to year, but with proper encouragement to productive enterprise, which must come with improved political conditions, there should spring up a substantial demand for machinery in the sugar, mining, paper mill, and possibly the cotton industries. These industries with the least bit of encouragement would become paying interests in this district. Already a number of small modern sugar mills have been erected here and better qualities of cane are being imported. It has been demonstrated that cotton can be advantageously produced in this district and American cotton seeds are being planted. The mining possibilities in this district are unlimited. Magnetic iron ore, graphite, coal, antimony, and lead exist here in abundance not far from tide-water. A good match factory could be established here to supply the market with a part of the large quantities of matches now imported from Japan.

American condensed milk manufacturers are losing an excellent opportunity by failing to push their Chinese trade more vigorously. Recently a British condensed milk company sent a motor launch to its Amoy representative to enable him to go up the interior waterways and properly advertise its goods. This company is doing a splendid business throughout China as a result of advertising its products in the native language and in ways that appeal to the Chinese people.

The Chinese are fond of marine products, and the abalone, found on the California coast, has gained favor with them. Increasingly large

quantities of canned goods are also being consumed. Tinned biscuits, especially the sweeter varieties, are very popular indeed. American biscuit manufacturers should put up their products in neat, small, sealed tins, and make an effort to take advantage of the many trade opportunities presented in China in this line. The same thing is true of foreign tinned jams. There is a canning factory in Amoy, financed and operated by local Chinese, which puts up and markets soya, canned pineapple, canned laichee, and all other native food products.

Trade in Treasure—Financial Conditions.

The movement of treasure in 1910 and 1911 is shown in the following table:

	Imports.		Exports.	
	1910	1911	1910	1911
Gold in bullion.....	\$3,041	\$16,358	\$21,104	\$2,751
Gold coins.....		2,579	6,016	10,579
Silver coins.....	2,143,573	2,421,971	701,745	807,594
Copper coins.....	108,368			

Of the silver coins imported, \$1,417,187 worth came from foreign ports and \$1,004,784 worth from native ports. The increased importations of silver were due to an increased demand for silver dollars, as native bank notes and ordinary mediums of exchange would not be accepted after the outbreak of the revolution. The currency of this port is different from that of others, as business interests use no local tael, and the unit of currency for business purposes is the silver dollar. The Hongkong & Shanghai Banking Corporation uses a theoretical unit, the so-called Spanish dollar, and the Japanese Bank uses the chopped yen as its unit. (A "chopped" coin is one which has been stamped by Chinese bankers to guarantee its value.) With these standards in use the silver dollar becomes a commodity, the price of which varies according to demand and supply. Early in the year the Hongkong & Shanghai Banking Corporation made a heavy importation of clean Hongkong dollars. The native customs bank received these in payment for customs duties but purchased chopped Mexican dollars at a discount from Foochow and deposited them at the Hongkong & Shanghai Bank, selling the clean Hongkong dollars outside at a profit. There are probably 1,000,000 silver dollars in circulation in this section of Fukien Province.

Subsidiary silver coins exchanged at \$1,051 to \$1,068 worth for 1,000 large silver dollars. Copper coins (1-cent pieces) fluctuated in exchange value from 120 to 130 pieces for one silver dollar. The lack of a fixed unit of local currency injures legitimate business badly, but naturally the banks profit by it.

There are 22 native banks in Amoy, 12 of which do a general exchange business, and 2 foreign banks. Of all these there is only one through which drafts on American and European cities can be negotiated. The native banks allow 7.2 per cent interest on fixed deposits and the foreign banks 4 per cent, but people hesitate to deposit in the native banks because of their reputation for instability. Exchange

from New York fluctuated during the year between 43½ and 45½ for demand drafts, which may be termed fairly steady and strong.

Shipping Record for the Year—Heavy Emigration.

During the year 1,710 vessels, of 2,127,689 tons, entered and cleared, as compared with 1,754 vessels, of 2,099,704 tons, in 1910. The total trade carried amounted to \$14,579,499, of which \$10,094,612 was carried in British ships. Four American vessels of a tonnage of 17,678 were recorded. During the year 55,799 passengers came to Amoy from abroad, the majority being Chinese emigrants returning from the southern colonies, and 114,519 passengers left the port for foreign countries, most of these also being emigrants to southern countries. This passenger traffic forms one of the chief business interests of this port. Two steamship lines are operated between this place and the Philippines to take care of this traffic and there are two large disinfecting plants to insure that passengers shall not be detained in quarantine in the Philippines. There are eight Chinese-owned steamers engaged in the passenger traffic of this port with the southern colonies and all appear to be making good returns on the capital invested.

The ease with which the native can be transported to the southern colonies has had the effect of raising wages here so that the cost of living is higher than in Foochow, from which port a comparatively small number of Chinese go abroad. There are about 300 Europeans and Americans in this district, more than half of whom are missionaries.

American General Importing House Advisable.

There is a good opportunity for the establishment in Amoy of a general American import house to operate in the three ports of Swatow, Amoy, and Foochow, which tap a population of twenty or thirty millions, and to cover also the island of Formosa. This firm, if staffed with two live Americans and provided with proper home connections, should be able to work up a very substantial and profitable business in this section of China. Condensed milk, flour, ginseng, patent lamps, dried and salt fish and dried shrimps, medicines, stationery, general notions, etc., most of which are now supplied through Hongkong dealers, could be sent direct to these ports through such a firm. A local general merchandise firm purchases over \$100,000 worth of merchandise abroad each year, mostly from England, but would be glad to buy from American houses at the same prices if a reliable man were here to take the orders.

SWATOW.

[By Consul C. L. L. Williams.]

An inspection of the figures of the gross and net valuation of the trade of Swatow in 1911 shows a slight decline from the high figures of 1910. This deficiency is divided between imports of foreign goods and exports to foreign countries, the coastwise trade, in spite of the revolution, showing an increase.

The apparent decline, however, is a book decline only and is due to a new standard of valuation. Under orders from Peking the customs authorities adopted the Canton values for use at this port instead of

the Shanghai values previously in use. The Canton values are possibly more accurate and are considerably lower. The duties collected, however, are almost all specific and are not affected by the alteration in the value standards used for statistical purposes, and consequently afford a better basis for comparison. For 1910 the total dues and duties collected by the Imperial Maritime Customs amounted to \$896,365 and for 1911 to \$994,121, thus indicating an actual increase in the year's trade of considerable size.

The dues collected from the native customs increased from \$23,816 in 1910 to \$25,488 in 1911. This trade, which is almost entirely junk-borne between Swatow and the Fukien and Kwangtung coast cities, is of interest as showing the extent to which Swatow acts as a distributing center.

Articles of Import and Export Trade.

Except for the kerosene trade with the United States, Borneo, and Sumatra and the trade with Indo-China, Siam, and the Straits Settlements, almost all the foreign trade of the port is carried on through Hongkong. The principal articles of import and export in 1910 and 1911 through the Imperial Maritime Customs were as follows:

Articles.	1910	1911	Articles.	1910	1911
IMPORTS.			IMPORTS—continued.		
Opium.....pounds..	519,745	272,021	Foreign sundries—Continued.		
Foreign cotton goods:			Oil.....gallons..	4,119,144	8,717,214
Shirtings, gray, plain,			Rice.....tons.....	74,462	13,434
pieces.....	114,496	109,262	Sugar—		
Shirtings, white, plain,			White.....do.....	2,504	2,252
pieces.....	174,416	168,093	Refined.....do.....	1,008	573
Sheetings, gray, plain,			Native sundries:		
pieces.....	90		Bean cake.....do.....	172,492	196,496
Drills, American, and			Beans.....do.....	38,699	43,276
English.....pieces..	1,067	1,767	Groundnuts.....do.....	7,114	2,574
Jeans, American and Eng-			Medicines.....value..	\$154,273	\$172,366
lish.....pieces.....	21,802	21,547	Rice.....tons.....	94,251	101,875
T cloths.....do.....	19,531	15,210	Silk piece goods.pounds..	165,733	141,100
Dyed shirtings.....do..	650	926	Tea—		
Cotton flannel.....do..	14,384	37,601	Black.....do.....	948,933	928,200
Cotton yarn:			Green.....do.....	1,600	12,900
English.....tons.....	11		Tobacco leaf.....tons..	1,414	1,032
Indian.....do.....	8,541	7,955	Vermicelli.....do.....	1,968	1,969
Japanese.....do.....	12	6	Wheat.....do.....	1,362	1,017
Cotton thread on spools,			EXPORTS.		
gross.....	38,402	32,170	Bags, gunny and hemp,		
Native cotton goods:			pieces.....	1,066,560	1,555,436
Shirtings, gray.....pieces..	490	920	Bamboo and bamboo ware,		
Sheetings.....do.....	12,967	11,980	value.....	\$96,568	\$75,657
Cloth, native nankeens,			Eggs, fresh.....value..	\$207,500	\$165,397
tons.....	152	152	Fans.....pieces.....	1,813,179	1,372,529
Woolen goods:			Flour:		
Camlets, English.....pieces..	1,252	1,068	Potato.....tons.....	3,111	4,611
Cloth, broad, medium,			Rice.....do.....	936	962
habit, and Russian,			Groundnuts.....do.....	1,544	1,058
yards.....	6,043	8,380	Indigo, liquid.....do.....	1,981	2,767
Long elis.....pieces.....	1,843	1,429	Joss sticks.....do.....	1,544	1,529
Spanish stripes.....yards..	29,641	22,852	Paper:		
Foreign metals:			Joss.....do.....	3,568	3,138
Iron and mild steel—			Other.....do.....	6,535	6,849
New.....tons.....	1,128	1,271	Pottery, earthenware.....do..	9,722	8,686
Old.....do.....	847	709	Sugar:		
Lead.....do.....	140	189	Brown.....do.....	42,392	57,426
Tin slabs.....do.....	506	561	White.....do.....	14,701	19,812
Tinned plates.....do.....	450	616	Tea:		
Foreign sundries:			Black, oolong.....pounds..	529,096	456,490
Coal.....do.....	63,298	81,870	Green, hyson.....do.....	58,060	102,266
Flour.....do.....	6,024	14,415	Umbrellas.....pieces.....	269,924	195,817
Ginseng.....pounds.....	25,633	17,505	Vegetables, dried and salted,		
Matches.....gross.....	1,033,736	1,100,168	tons.....	14,930	12,449
Medicines.....value.....	\$142,650	\$153,878			

Trade through Native Customs.

Through the native customs the principal articles imported were: Salt fish, 3,348 tons; medicines, \$6,846; molasses, 1,018 tons; brown sugar, 1,697 tons; and tea-seed cake, 930 tons. The principal exports were: Paper fans, 253,120; potato flour, 2,031 tons; paper, 1,980 tons; timber, softwood, 28,356 pieces; wood poles, 9,345 pieces; shoes, 7,440 pairs; and articles of foreign produce, \$1,085,720.

Summary of Year's Trade.

The Imperial Maritime Customs summary of the year's trade as compared with 1910 is as follows (exchange value at 64 cents for both years):

	1910	1911
Imports of foreign goods:		
From foreign countries and Hongkong.....	\$12,249,234	\$10,143,373
From Chinese ports.....	278,852	687,985
Total foreign imports.....	12,528,086	10,831,358
Reexported.....	149,799	387,129
Total net foreign imports.....	12,378,287	10,444,229
Imports of native produce.....	12,829,668	13,429,446
Reexports.....	860,254	772,551
Total net native imports.....	11,969,414	12,656,895
Exports of native produce of local origin:		
To foreign countries.....	4,629,050	4,276,000
To Chinese ports.....	4,582,400	5,528,922
Total exports native produce.....	9,211,450	9,804,922
Gross value of trade of port.....	34,569,204	34,065,726
Net value of trade of port.....	33,550,151	32,906,046

Flour and Ginseng Imports.

The greatly increased imports of foreign flour, which is practically all American, were due to the shortage of rice caused by the floods in China and unseasonable weather in other rice-producing countries, and to the decrease in the imports of Shanghai mill flour. A considerable part of the ginseng imported is American, though just how much is impossible to say, as the customs do not indicate country of origin. Ginseng is retailed in Swatow at \$20, \$40, and \$60 Mexican per catty (1½ pounds), depending on quality, which is determined by the size and shape of the roots, those of first quality weighing about 1 ounce each. Good roots must also be well corrugated, smooth, and succulent. Very little wild ginseng, properly speaking, is imported, the prices quoted being for ginseng found wild and transplanted and cultivated, most of this coming from America. The great wholesale ginseng market for South China is Hongkong, but one or two local firms are endeavoring to work up a direct trade with America. One dealer says that he has done about \$5,000 worth of business during the year as a result of assistance given by this office in effecting trade connections.

Features of Kerosene Trade.

Kerosene is the most important American product imported into Swatow. The trade in 1911 was marked by the entrance into this district of the Texas Oil Co., with a trial shipment of oil, packed in

wooden cases of two 5-gallon cans, and by the withdrawal of the Rangoon Refinery Co. Most of the trade remains fairly evenly divided between the Standard Oil Co. and the Asiatic Petroleum Co. (Ltd.), a powerful English organization, drawing its supplies from Borneo and Sumatra.

While imports of American oil were above the average and imports of other oils were normal, the whole trade was seriously affected during the last three months of the year by the revolutionary disturbances. The close of the year found importers with stocks in storage much above normal, and this condition still obtains at this writing (Mar. 1, 1912). Until the transportation of goods from one town to another is made safe there is little chance of any revival of the oil trade. Imports of American kerosene into Swatow in 1911 amounted to 4,443,978 gallons, from Borneo 614,799 gallons, and from Sumatra 3,064,626 gallons.

Other Articles—Foreign Clothing.

Among unenumerated sundries not shown in the table were fancy buttons to the number of 13,149 gross. These are largely used by the Chinese on their native dress and are usually of the size of waist-coat buttons. Brass and colored-glass buttons are also popular. Cement, which is largely used for building purposes, was imported to the amount of 2,067 tons.

Foreign clothing to the value of \$82,500, not including leather and rubber goods, was imported. As a result of the revolution a large number of Chinese have adopted foreign dress, and there should be a good demand for ready-made clothing of the right type, if it can be placed on the market at a sufficiently low price. Materials must be of light weight, and gray, green, and blue striped flannel would perhaps suit the market best. High quality is not necessary and woolen and cotton mixtures are quite satisfactory. Two local merchants inform me that they can sell three-piece suits of "medium" quality at \$5 to \$6 per suit, and suits of "good" quality at \$8.50. The terms "medium" and "good" are used with local significance and would about correspond to "cheap" and "medium cheap" in the United States. It should be remembered that the Chinese as a race are considerably smaller than the average American, and that small sizes would be in the greatest demand.

Clothing sundries in demand include woolen and cotton mixture sweaters in dark red, green, and white; rubber collars, double, in small sizes; made-up ties; and cotton underclothing and socks. There is an extensive market for the two last-named articles, which is partially supplied by goods-manufactured locally and in Hongkong with American machinery. This office will be glad to supply details as to prices, styles, and packing, and to furnish samples if necessary, to interested parties.

Foreign Boots and Shoes Extensively Used—Paper Imports.

Some 3,600 pairs of boots and shoes were imported during the year. These are even more extensively used by the local Chinese than articles of foreign clothing. The demand at present is met very largely by native-made shoes of foreign pattern but Chinese leather. There should be a good market for imported shoes if the prices are right, as the Chinese leather is very inferior. Low shoes, or simply "shoes," as

they are known in China, should not retail at more than \$4.50 Mexican (about \$1.95 U. S. currency) per pair, and high shoes or "boots" at not more than \$7.50 Mexican (about \$3.26 U. S. currency) per pair. Shoes made of native leather sell at about \$2.50 to \$3 Mexican per pair (\$1.10 to \$1.30). Some inferior American "boots"—which I am assured were made of paper—were placed on the market here at \$3 Mexican per pair; they were naturally not satisfactory, and were a bad advertisement for the American article. Tan leather is preferred to black; lace shoes are usually seen, although elastic side "boots" are fairly common. Boots are almost always laced, buttons not being in favor.

Paper to the value of \$67,584, representing 763 tons, was imported during 1911. This was chiefly printing paper, and was brought from Japan. Germany formerly had the monopoly of this trade.

Orange and Sugar Crops Normal--Drawn Work.

The orange crop on the trees was about normal, but had it not been for the typhoon in October, there would have been a much larger yield. This crop ripens in December and January, but disorders interfered with the picking of the fruit. Unripe, ripe, and overripe fruit were all picked at the same time about the beginning of the year, and a large percentage of the crop had been touched as a result of the lack of attention. Untouched "coolie" (close-skinned) oranges for export brought about \$1 to \$1.30 per 100 pounds, and touched oranges for local consumption about half that price. The crop of "mandarin" (loose-skinned) oranges was not picked in time, and in consequence a large part of it rotted on the trees and was worthless. By the end of January these oranges reached the high price of \$3.50 per 100 pounds as a result of the shortage. These are not suitable for export abroad, as they do not pack well, but are in great demand by the Chinese in their New Year's festivities.

The year's sugar crop was normal. The Yangtze Valley market was closed on account of the troubles there, but an unexpected demand from Hongkong for sugar for refining purposes saved the Swatow dealers. Considerable quantities were placed at about \$2.30 per 100 pounds, but the market still remains slack, dealers having been unable to clear 1910 stocks. Local prices per 100 pounds in December, 1911, were as follows: Refined: No. 1, \$4.37; No. 2, \$4.14 to \$4.18; No. 3, \$3.83 to \$3.88; No. 4, \$3.27; raw, \$3.04.

For crude sugar at producing points about 65 to 69 cents per pot of 46 to 53 pounds was paid, being a decline of 22 cents from 1910 prices.

There was a good demand for drawn work throughout the year, especially marked toward its close. This was due, it is said, not so much to increased consumption as to decreased production, resulting from workers leaving the city factories on account of the troubles. The exports of this product are not shown in the published customs returns, but according to manufacturers about \$13,000 worth was shipped to Chinese ports and about \$71,600 worth exported altogether. Much of this product is shipped by mail in small parcels.

Railway Traffic--Construction of Waterworks.

The Swatow-Chaochowfu Railway carried about 700,000 passengers during the year, yielding an income of \$86,800, and carried some 16,000 tons of freight yielding an income of about \$3,200.

Owing to a loss of about \$15,000 caused by the flood of last August no dividend was declared.

The construction of the waterworks is progressing rapidly. The filter beds and power houses at the intake station at Ampo have been completed and the machinery will be installed shortly. Some trouble has been experienced with the walls of the filter beds, due to settling, there being no bottom for building purposes near Swatow. The machinery at the intake station will consist of two sets of Worthington pumps, in each set one intake pump with a capacity of 1,350 gallons per minute, and one service pump with a capacity of 1,000 gallons per minute. There will be a service reservoir of 800,000 gallons capacity at Ampo and a tower in Swatow having a capacity of 150,000 gallons. This tower is of steel and is built on a floating concrete basis. Street mains have been laid through all the principal thoroughfares, and if it were not for the difficulty of acquiring certain land necessary to the completion of the work, water could be turned on in the street mains by October next. Only British machinery and materials are being used.

There is talk of the extension of the plant of the Swatow-Kaiming electric light works to supply the foreign residences at Kakchioh, across the harbor from Swatow. If the plan materializes the new plant will probably consist of motor-driven dynamos and will be required to furnish current for about 1,000 lamps.

Trade in Firearms and Motor Launches.

During the revolution large quantities of arms and ammunition were sold, and it is possible that some market still exists for them. Generally speaking, Canton or Hongkong would be the best place to secure orders. No goods of this kind can be imported without special permission, which in this case should be secured from the military governor of Canton.

Three commercial motor launches were purchased by local Chinese during the year and were placed in operation early in 1912. Two of them, at least, and possibly the third, are proving satisfactory. It is likely that there will be a demand for more of these boats, and in order to obtain orders trade relations should be established with Hongkong shipwrights.

CHEFOO.

[From Consul John Fowler.]

The trade of Chefoo in 1911 showed a marked decline over the previous year, although that of Shantung Province increased. This is due to the fact that Tsingtau, with every modern port convenience, has absorbed both the interior and the littoral trade of Shantung, and the Japanese port of Dairen has taken the place of Chefoo as the distributing center of Manchuria.

The port of Chefoo is naturally one of the best in Asia, but no improvements or facilities in the way of jetties, docks, or landing stages have ever been made with the exception of a small stone jetty for the landing of passengers. For 50 years steamers have thrown their ashes and refuse over the side and no attempts have ever been made to deepen the anchorage or remove dangers, and the tide is not strong enough to scour. In the winter stormy gales to some extent hamper the handling of cargo. The trade of Chefoo

is therefore confined to the limited territory adjacent to the port. If the city is connected with the interior by railways, and if proper docks and landing facilities are constructed, it may regain its former prestige, but this is doubtful.

Plague, Floods, and Revolution Keep Down Trade.

The trade year of 1911 began well, but late in February pneumonic plague appeared and spread all over the district, causing in six weeks over 4,000 deaths. Naturally the people ceased work, all factories closed, and ships no longer entered the port. With the warm weather of spring the disease disappeared, but the trade never really recovered. Foreigners were afraid of anything coming from Chefoo, and the silk trade was nearly annihilated.

The summer was cold and unusually dry. Crops near Chefoo were fairly good, but in the south they were a failure on account of the floods, and it is estimated that over 100,000 persons were made destitute. In the fall the effects of the political revolt were keenly felt and failure followed failure until one of the leading native firms succumbed, involving many enterprises. Chefoo became the base of the military operations for North China, and although no serious trouble occurred in the city, the neighboring country was the scene of constant conflicts. Thus the year, beginning with the plague and ending with revolt, afforded everything necessary to stop trade.

Railway and Telegraph Service—Shantung Cotton.

The Pukow-Tientsin Railway, running across the Province from Pukow on the Yangtze River opposite Nanking, through Tsinan to Tientsin, was completed, but almost immediately it was seized by the military forces. Recently the telegraphic service here announced that deferred telegrams fulfilling certain conditions would be accepted for transmission at half the ordinary rates to European and American countries.

The following article dealing with Shantung cotton is taken from the China Tribune:

Cotton brought to Tientsin amounts to about 40 per cent of the entire product of Shantung. Transactions are invariably carried on through the native wholesale dealers and all attempts of foreign firms to buy direct from native growers have so far been without avail. Foreign buyers are thus subjected to the practices usually attendant on these transactions of watering cotton or mixing with it lumps of earth or bits of rope in order to increase its weight.

Ginned cotton is usually packed in bales of 55 to 85 catties (73 to 113 pounds), including the tare, which amounts to $3\frac{1}{4}$ per cent. Transportation from Tsinan to Tsingtau, including charges for loading on a steamer, costs about 75 cents silver per bale. The difference between the prices of the grower and the wholesale dealer in Tsinan is about 7 to 10 per cent of the current prices, of which about 2 per cent is freight charges to Tsinan and the balance the commission of the small and large brokers and the wholesale merchant.

Only a small portion of the Shantung cotton exported from Tsingtau is sent to Japan, most of it going to Shanghai where it is consumed in the spinning mills. The freight from Tsingtau to Shanghai is \$1 Mexican per 100 kilos (220 pounds). Large quantities of Shantung cotton, especially the Lintsing product, have been exported from Tientsin to Great Britain and Germany in the last year or two. Tientsin merchants buy cotton much cheaper than foreign buyers at Tsinan, having larger capital, more experience and more painstaking methods of buying. They send their agents to the country during the summer and these men after looking at the plants contract for purchases, paying a deposit to the growers.

At various cotton-producing districts in Shantung cotton gins of Japanese make are used. These cost only about \$40 apiece, but are easily damaged and do not take away all the seed. German machinery costs from 300 to 400 marks (\$71.40 to \$95.20), but its durability and thoroughness put it far above the Japanese machinery.

Articles Entering Into Foreign Trade.

The principal articles of import and export through the Imperial Maritime Customs in 1910 and 1911 were as follows:

Articles.	1910	1911	Articles.	1910	1911
IMPORTS.			IMPORTS—continued.		
Opium.....pounds..	36,066	100,249	Foreign sundries—Contd.		
Cotton goods:			Seaweed, long, pounds	1,390,666	4,994,800
Shirtings, plain gray—			Sugar—		
American, pieces.	7,335	6,413	Brown.....do....	10,644,266	7,616,000
Other.....do....	27,664	32,990	White.....do....	5,070,866	7,052,666
Shirtings, plain white,			Refined.....do....	4,305,600	2,330,723
pieces.....do....	72,305	67,867	Candy.....do....	1,070,866	1,029,666
Drills—			Native sundries:		
American, pieces.	25,590	22,617	Beans.....do....	10,439,466	19,626,800
Other.....do....	30,967	17,724	Cotton, raw.....do....	216,133	415,066
Jeans—			Flour.....do....	20,654,400	13,816,000
American.....do....	2,182	1,108	Oil, wood.....do....	1,349,333	1,406,266
Other.....do....	61,533	79,226	Paper.....do....	9,205,200	9,796,53
T cloths—			Rice.....do....	38,404,000	30,570,900
American.....do....			Samshu.....do....	2,671,866	2,865,066
Other.....do....	58,845	79,415	Silk—		
Lawns and muslins,			Raw, wild.....do....	372,123	386,409
pieces.....do....	7,850	7,197	Cocoons.....do....	14,679,866	15,117,066
Chintzes.....pieces	19,067	26,952	Soda.....do....	746,000	1,243,866
Italians.....do....	58,251	59,131	Sugar—		
Lastings.....do....	4,593	10,961	Brown.....do....	3,455,066	7,206,809
Dyed shirtings.....do	686	647	White.....do....	1,794,400	2,903,333
Dyed T cloths.....do	660	55	Tobacco, prepared,		
Dyed T red cambrics,			pounds.....do....	1,053,066	1,052,933
pieces.....do....	14,832	24,761			
Dyed T red shirtings,			EXPORTS.		
pieces.....do....	10,435	6,794	Beancake.....pounds..	62,509,733	70,931,733
Japanese cotton cloth,			Beans.....do....	3,675,866	1,952,533
yards.....do....	1,280,009	1,146,123	Beef.....do....	1,359,533	109,733
Velvets and velve-			Dates:		
teens.....pieces	55,687	60,005	Black.....do....	975,866	993,269
Handkerchiefs,			Red.....do....	4,258,400	1,249,609
dozen.....do....	21,663	9,810	Eggs.....number	9,134,665	7,065,060
Towels.....dozen	57,327	32,852	Fish:		
Cotton yarn:			Dried.....pounds..	611,733	556,266
English.....pounds..	182	800	Salt.....do....	5,456,400	5,001,066
Hongkong.....do....	226	14,000	Groundnuts.....do....	4,130,733	9,827,066
Indian.....do....	6,064	615,333	Groundnuts, shelled,		
Japanese.....do....	35,702	4,264,800	pounds.....do....	23,636,400	22,530,400
Iron and mild steel:			Licorice.....pounds..	1,582,133	1,033,866
New.....do....	2,269,333	2,937,200	Oil, bean.....do....	2,270,266	1,728,400
Old.....do....	9,179,066	9,618,000	Seed, sesamum.....do....	758,400	792,133
Steel, bamboo.....do	643,066	556,666	Silk:		
Foreign sundries:			Raw, white.....do....	2,600	933
Dyes, aniline.....value	\$31,250	\$50,365	Yellow.....do....	22,533	19,333
Flour.....pounds..	452,400	13,431,333	Raw, wild, hand,		
Matches, Japanese,			pounds.....do....	1,303,333	1,414,266
gross.....do....	1,383,409	1,791,819	Raw, wild, steam,		
Oil, kerosene:			pounds.....do....	364,400	211,466
American.....galls	3,358,214	2,860,801	Raw, wild, refuse,		
Sumatra.....do....	100,000		pounds.....do....	2,019,866	2,006,533
Paper.....pounds..	1,333,300	1,063,333	Pongees.....pounds..	965,866	783,406
Soda—			Vermicelli.....do....	31,529,733	29,936,466
Ash.....do....	4,031,066	1,482,266	Walnuts.....do....	666,066	329,333
Crystal.....do....	128,800	36,666			

Declared Exports to United States.

The United States sent \$624,263 worth of kerosene to Chefoo in 1911, as against \$399,934 worth in 1910. Declared exports to the United States in 1910 and 1911 were as follows:

Articles.	1910	1911	Articles.	1910	1911
Beans.....do....		\$6	Pine nuts.....do....	\$50	
Bean oil.....do....	\$4,006		Silk.....do....	106,009	\$29,274
Eggs.....do....	15		Vermicelli.....do....		43
Groundnuts.....do....	418	4,790	Walnuts.....do....	17,669	7,268
Honey.....do....		12			
Lace.....do....	84		Total.....do....	126,771	\$3,600
Personal effects.....do		2,207			

Declared exports from Chefoo to Hawaii consisted of \$656 worth of silk, compared with \$587 worth in 1910. There were no declared exports to the Philippines in 1911.

Six American ships, with a tonnage of 4,222, entered in 1911, the total number being 3,896, of 3,183,350 tons. British, Japanese, and Chinese vessels predominated.

Summary of Two Years' Trade.

A summary of the trade of Chefoo in 1910 and 1911, according to the Imperial Maritime Customs, is given in the following table, conversions having been made at the rate of 65.25 cents per haikwan tael for 1910 and 65.3 cents for 1911:

	1910	1911
Imports of foreign goods:		
From foreign countries and Hongkong.....	\$3,447,133	\$3,341,240
From Chinese ports.....	4,298,249	3,831,075
Total foreign imports.....	7,745,382	7,172,315
Reexported to foreign countries and Hongkong.....	1,158,664	819,631
Reexported to Chinese ports.....	1,334,867	1,014,090
Total reexports.....	2,493,531	1,833,721
Total net foreign imports.....	5,251,851	5,338,594
Imports of native produce.....	6,340,862	7,297,667
Reexports to foreign countries.....	588,735	694,633
Reexports to Chinese ports.....	919,015	1,066,548
Total native reexports.....	1,508,350	1,761,181
Total net native imports.....	4,838,512	5,536,486
Exports of native produce of local origin:		
To foreign countries.....	2,286,430	2,713,415
To Chinese ports.....	7,325,955	6,374,070
Total exports native produce.....	9,612,385	9,087,485
Gross value of trade of port.....	23,704,629	23,557,467
Net value of trade of port.....	19,702,748	19,962,565

HAWAIIAN BUSINESS NOTES.

[From the Honolulu Bulletin.]

Building operations in Honolulu are active throughout the city and suburbs.

Wire fence.—A contractor has finished building 4,000 feet of unclimbable woven-wire fence, mostly 10 feet high, for the Government on Quarantine Island.

Hotel proposed.—The syndicate owning the Fairmont and St. Francis Hotels at San Francisco are considering the erection of palatial hotels in Honolulu and at the Volcano.

New warehouse.—Bids are being called for a one-story reenforced concrete warehouse for the California Feed Co., Honolulu, with 12,000 square feet floor space and some offices; H. L. Kerr is architect.

Cheap ice.—Hawaii furnishes the Government with the cheapest ice that is supplied to the Army. The new local contract for the coming fiscal year is 15 cents per 100 pounds, the monthly consumption being 450,000 pounds. In Chicago the Army pays 25 cents, and there are posts where it goes as high as 75 cents and \$1.

New ships.—Secretary Wood of the promotion committee states that there are plans by both the Matson concern and the Pacific Mail Co. for building a number of new steamers for the Pacific trade. The Pacific Mail is prepared to spend \$12,000,000 on new vessels, of which there will be four. The plans for the new ships are all finished and the work of construction will soon commence. The Matson Co. will build one massive steamship to be placed in the local trade. Secretary Wood states that the figures that were placed before him while he was on the coast led him to believe that the tourist trade to Hawaii this coming season will increase 100 per cent.

GERMAN HAIR-NET INDUSTRY.

[From Consul Milo A. Jewett, Kehl.]

Hair nets, properly speaking, are not simply nets for the hair; they are nets made of hair. Strassburg, Germany, and Vienna, Austria, are the only cities where hair nets are sold in important amounts.

Years ago Strassburg was the greater center of this trade; but since then the Alsatian peasants have devoted more time to the cultivation of their fields and vineyards and have engaged in other industries, while the peasants of Bohemia still continue to work at hair-net making because their rugged mountain country furnishes few opportunities for more lucrative employment. It now appears that rather more hair nets are made in Austria than in Alsace-Lorraine, but Strassburg buys and sells many of the Austrian nets.

It is estimated that Strassburg sells annually about 12,000,000 hair nets. During the last year trade has declined owing to the change in the style of coiffure, and also on account of the increased use of cheaper nets made of waste silk.

An "Hereditary" Industry—Wages.

The hair nets are made almost wholly in the homes of Alsatian and Austrian peasants. Weaving the nets is a work requiring manual dexterity that can be acquired successfully only in youth, when the fingers are supple and the eyesight is good. This industry and the peculiar skill required to net hair has become in part hereditary. The children begin first to tie the hairs together, end to end, to make one long hair. Then, without any implements except a round piece of wood about 6 inches long and half an inch in diameter and a needle, the older girls and women, and sometimes the men also, weave the nets. Each mesh is knotted in much the same way that fish nets or hammocks are made, only, of course, tying a single hair is a more delicate and difficult task than tying a string.

The work is poorly paid. The rate is unusually low at present—19 cents a dozen nets of ordinary color. That means that a worker must tie about 12,000 knots to earn 19 cents, besides knotting the hair together, adjusting, counting, folding, and packing the nets. To make a dozen nets is a day's work of 10 or 12 hours. When the demand is greater, the pay increases more or less in proportion. More is paid for making gray nets than for the ordinary colors. The latter are made with a single hair; but in gray nets one white hair and one colored hair, black, brown, or auburn, are loosely twisted together. These nets, accordingly, require twice as much hair and their weaving is slower and more difficult work.

Chinese Hair Used—Styles of Nets.

Practically all the hair used in making hair nets comes from China. No other hair possesses just the right degree of coarseness and resilience to give that peculiar elastic spring to the mesh that a good hair net requires. The hair of the northern blond races is too fine and soft, and consequently utterly useless for this purpose. The black hair of the southern races, Italian and Spanish, is a little coarser and more suitable. Japanese hair is too stiff and coarse. The hair of the yak has been tried without much success.

Most all the Chinese hair used here is prepared at Paris. The preparation of the hair for hair nets is a complicated and delicate process

in which only a few persons of long experience succeed. It is a special and more or less secret process which consists in cleaning the hair, bleaching it, washing out the bleach, and then dyeing it to just the right colors and shades that style and the market demand.

The nets of Strassburg are made in two general forms—the circular, self-adjusting cap nets and the flat form. Each net is shipped in a separate envelope generally bearing some trade or firm name.

[The names of the principal Strassburg manufacturers of hair nets may be secured from the Bureau of Manufactures. A review of the Austrian human-hair industry was published in Daily Consular and Trade Reports on Jan. 15, 1910.]

TRINIDAD NOTES.

[From Consul Franklin D. Hale, Port of Spain.]

American Taxicabs—New Steamers.

The West India Engineering & Motor Supply Co. has recently imported from New York four taxicabs for purposes of hire in Port of Spain and vicinity.

Since the inauguration last year of the Seeborg Line of steamships plying between Mobile (Ala.) and the Windward Islands and Trinidad, the business has so developed as to make it necessary to put additional vessels on this run, the latest acquisition being the chartered German steamship *Hispania* of 1,574 tons.

The local government has ordered through the London Crown agents a new 14½-knot coasting steamer for use on the southern route in connection with the railway at San Fernando. The development in the coconut industry in the southern district and the prospective growth of the oil industry necessitate a better steamship service.

Satisfactory Progress of Railway Extensions.

The chief engineer on the railway extensions reports satisfactory progress. Of the 16½ miles of earthwork on the Siparia branch 9 miles are now near completion, while on the Rio Clara route 10 of the 13 miles are about ready for laying the rails. The ironwork for all the bridges has been contracted for in England, and shipments will be made as fast as possible. The exact model of engine to be used will not be determined until the constructed bridges have been tested to see what weight they will safely sustain.

As a part of the general plan, the necessary sea wall at San Fernando and the station at Picton are in course of construction. This being entirely governmental work, all materials, etc., so far as possible, are procured from England through the Crown agents.

It is reported that there is plenty of labor, about 1,200 men and women being employed on the different divisions. The extreme drought prevailing for so many weeks in the districts where this work is being carried on has necessitated sending water from Port of Spain daily by train to meet the needs of the laborers.

Compulsory wireless installation.—The Uruguayan consulate general at New York advises that the law making compulsory the installation of wireless apparatus on board vessels arriving at or leaving the ports of Uruguay (mention of which was made in Daily Consular and Trade Reports on Mar. 7) became effective June 11.

BRITISH COTTON GOODS EXPORT GAINS.

The enormous sales abroad of Manchester yarns and cloth, which exceeded half a billion dollars last year, have made further gains this year. Up to May 1, cotton-yarn shipments were 83½ million pounds, against 76½ million pounds in the first four months of 1911 and 62½ million pounds in the same period of 1910. The best purchasers, for the periods above mentioned, were as follows:

Countries.	1910	1911	1912	Countries.	1910	1911	1912
	Million pounds.	Million pounds.	Million pounds.		Million pounds.	Million pounds.	Million pounds.
British India.....	8.4	12.5	13.7	Roumania.....	1.6	3.1	3.8
Germany.....	15.8	19.2	18.5	Turkey.....	2.5	2.8	4.7
Netherlands.....	14.0	15.7	15.7	China.....	.3	.6	1.3
Bulgaria.....	1.0	1.5	2.6	Canada.....	.9	.8	1.2

Exports of cotton piece goods from the United Kingdom for the first four months of the following years, are stated roundly in millions of yards:

Piece goods.	1910	1911	1912	Piece goods.	1910	1911	1912
	Million yards.	Million yards.	Million yards.		Million yards.	Million yards.	Million yards.
Gray or unbleached, total	590.0	740.0	680.0	Printed: Other sorts—Con.			
Switzerland.....	24.2	30.0	25.5	Turkey.....	41.4	50.6	37.8
Germany.....	15.8	13.2	15.0	Egypt.....	21.3	24.7	8.6
Belgium.....	9.5	3.7	2.2	Foreign West Africa.....	7.8	10.2	9.6
Portugal.....	5.5	3.2	1.3	Persia.....	6.8	6.7	10.6
Turkey.....	18.6	30.0	25.0	Dutch East Indies.....	22.1	27.9	29.3
Egypt.....	16.9	25.3	18.6	China and Hongkong.....	10.7	14.8	16.0
Foreign East Africa.....	5.5	4.0	2.2	Cuba.....	5.1	5.9	9.2
Dutch East Indies.....	9.3	11.9	15.5	Central America.....	2.7	3.9	3.8
China and Hongkong.....	54.0	109.0	60.0	Colombia and Panama.....	6.1	6.8	5.8
Japan.....	11.0	31.5	2.6	Venezuela.....	3.1	6.3	5.9
Chile.....	3.4	2.6	5.7	Peru.....	4.0	3.5	2.8
Argentina.....	5.2	5.6	5.4	Chile.....	4.7	3.9	4.4
British India.....	342.4	399.0	433.6	Brazil.....	10.0	13.6	6.7
New Zealand.....	3.2	4.0	2.0	British Africa.....	23.0	22.0	23.0
Australia.....	5.4	6.4	6.1	British India.....	122.4	120.8	114.5
Canada.....	3.2	2.5	1.6	Ceylon and Straits.....	8.4	8.1	8.8
Bleached, total.....	531.4	625.6	676.8	Australia.....	7.2	9.0	9.0
Switzerland.....	6.6	7.9	6.0	Canada.....	12.8	10.5	10.1
Roumania.....	2.4	2.9	4.5	Dyed, total.....	382.0	453.0	427.0
Turkey.....	28.9	37.9	30.5	Germany.....	6.9	8.5	7.3
Egypt.....	23.6	39.8	30.5	Netherlands.....	4.7	5.1	4.8
Morocco.....	10.2	12.8	21.2	Belgium.....	4.4	4.3	4.4
Persia.....	2.8	2.7	4.5	Greece.....	2.3	2.4	2.8
Dutch East Indies.....	12.6	19.5	17.3	Roumania.....	5.4	7.2	10.3
China and Hongkong.....	39.3	77.9	105.0	Turkey.....	20.6	30.8	23.8
British India.....	213.0	226.0	251.0	Egypt.....	11.3	16.6	12.0
Australia.....	16.0	15.0	16.3	Foreign West Africa.....	13.1	11.3	9.6
Canada.....	12.0	10.0	8.4	Persia.....	2.0	2.7	4.0
Printed: Flags, handkerchiefs, and shawls, total	13.3	14.2	15.2	Dutch East Indies.....	11.7	17.2	18.2
Germany.....	1.2	1.5	2.3	Siam.....	2.2	4.2	4.3
Italy.....	.2	.25	.25	China and Hongkong.....	36.9	44.0	51.9
Turkey.....	.88	1.5	.87	Japan.....	4.3	11.5	5.0
Dutch East Indies.....	.4	.86	.9	Cuba.....	10.0	6.9	10.7
China and Hongkong.....	.15	.14	.63	Mexico.....	2.4	3.4	3.6
Peru.....	.15	.16	.16	Central America.....	4.0	6.6	7.2
Chile.....	.12	.16	.25	Colombia and Panama.....	4.8	5.5	5.3
Brazil.....	.17	.46	.39	Venezuela.....	4.3	9.7	10.0
Argentina.....	.33	.26	.23	Peru.....	3.8	3.8	4.5
British Africa.....	1.6	1.2	1.2	Chile.....	7.8	5.5	5.3
British India.....	8.4	3.1	3.4	Brazil.....	18.0	26.7	25.3
Ceylon and Straits.....	.48	.4	.65	Uruguay.....	3.9	4.1	3.5
Printed: Other sorts, total.....	387.0	423.0	397.0	Argentina.....	20.0	19.0	15.3
Germany.....	2.1	4.4	2.9	British Africa.....	22.0	26.0	23.7
Netherlands.....	2.6	1.8	2.0	British India.....	61.9	70.6	61.8
Belgium.....	2.9	3.5	3.2	Ceylon and Straits.....	6.7	10.0	5.0
Greece.....	3.2	3.2	3.4	Australia.....	19.0	20.0	20.8
Roumania.....	7.8	9.7	12.6	New Zealand.....	3.8	4.2	4.2
				Canada.....	12.6	9.2	7.6

Exports of British piece goods for the first four months of this year reached 2½ billion yards. Especially noteworthy are the large sales to China, with large increases in bleached, printed, and dyed cloth, and the steady development of the English cotton-goods trade in the Balkan States and the Levant generally. The Bureau of Manufactures at Washington has been making special investigations of the Near Eastern textile markets, and several publications relating thereto, with samples, prices, etc., are available to American manufacturers and their agents.

BETTER PARCEL POST SERVICE TO CHILE.

In response to the recommendation of the American consulate at Valparaiso, the United States Post Office Department has arranged with the postal administration of Chile for the making up and dispatch of parcel post mails from this country addressed to the office of Valparaiso, these mails to contain parcels destined for the Provinces of Aconcagua, Chiloe, Llanquihue, Magallanes, Valdivia, and Valparaiso.

Conditions as they existed before the establishment of the direct exchange between the United States and Valparaiso are set forth in the following report by Vice Consul Charles F. Baker, upon which the action of the Post Office Department was based:

According to a special agreement, dated December 1, 1908, on this subject with the Chilean Government, Iquique and Santiago are the only two points in the whole of the country that enjoy direct exchange of parcels; that is, all parcel post packages arriving from the United States for Valparaiso must go first to Santiago, some 115 miles inland, to be entered, etc., and then returned to this port for delivery; while goods arriving in the same manner from any other part of the world and destined for Valparaiso are entered here.

Owing to the roundabout methods described, merchandise from the United States for this port suffers a delay of 15 days in delivery (the very thing merchants hope to avoid by the use of the parcel post), while German, French, or English packages are in the hands of the consignee within three days at most from the date of arrival. The loss sustained by packages after their arrival at Santiago and before they reach the consignee in Valparaiso is also a matter that gives rise to an endless amount of complaint.

Opportunity to Increase Mail Order Business.

Given equal advantages with other markets, it would seem that American interests should be able to do a good parcel post business with Chile in ladies' and children's furnishings (excepting hats and the finer woolens and silks) men's furnishings, and shoes of all kinds. There is also a good opportunity for the smaller miscellaneous lines in which the American market abounds; articles which are not to be found in stock here because the demand is not general enough.

These things could be brought to the notice of the consumer by advertising, facilities for which are fairly good in Chile, and the rates are very reasonable.

Roughly speaking, there has been an annual increase of about 40 per cent in the parcel-post business of Valparaiso since 1908, the number of packages handled for that year being 18,917; for 1909, 27,687; for 1910, 38,708, and for 1911 about 50,000.

The volume of the parcel-post business for the entire country for the five years ended in 1910 is shown in the following table, the values being given in United States currency:

Countries.	1906	1907	1908	1909	1910
France.....	\$141,152	\$154,223	\$558,480	\$328,601	\$576,564
Germany.....	138,070	113,518	68,098	276,602	329,320
Great Britain.....	20,440	32,515	132,689	128,154	86,322
United States.....	57,327	23,244	86,666	99,344	38,975
Other countries.....	49,241	42,748	147,785	113,509	224,754
Total.....	406,230	366,248	989,718	944,300	1,255,935

REVIEW OF THE SWISS WATCH INDUSTRY.

[From Consul General R. E. Mansfield, Zurich.]

The year 1911 was one of unusual activity and general prosperity in the watch industry of Switzerland. The factories were all running continuously and to their full capacity. There was a good demand for the Swiss product and at prices which returned better profits than at any time in recent years. The export figures for 1911 exceeded those of any year in the history of the industry, the total values surpassing those of 1906, when the watch trade reached its previous highest level.

Notwithstanding the tariff duties on watch exports to the United States, the export values there last year increased \$109,661 as compared with 1910, and orders placed by American importers with Swiss manufacturers during the latter part of the year, for 1912 delivery, indicate that the trade will be greatly augmented this year.

Of the total increase in value of watch exports for last year, as compared with the previous 12 months, amounting to \$3,282,874, Great Britain, Germany, and Austria contributed the largest shares, in the order named. The trade with Argentina and Brazil also shows considerable increase, mostly in cheaper grades of nickel, gun-metal, and silver watches, which are purchased extensively by people living in the agricultural districts. South America is regarded by the Swiss manufacturers as a promising market for their products. The only unfavorable feature of the trade was the decrease in exports to Morocco, caused by political disturbances, which affected the business with both the natives and French in that territory.

The majority of factories have sufficient orders in hand to guarantee steady employment and profitable business for the present year, and some of the manufacturers are enlarging their plants for increasing the output to meet the demand for their products. The general outlook is very satisfactory, and the industry has apparently fully recovered from the serious depression through which it passed a few years ago.

The number and value of watches and parts thereof exported during the year were as follows:

Articles.	Number.	Value.
Watch movements, finished.....	933,145	\$1,404,433
Watch cases, nickel, unfinished.....	247,230	31,866
Watch cases, silver, unfinished.....	32,415	11,370
Watch cases, gold, unfinished.....	1,286	5,811
Watch cases, nickel, finished.....	2,341,644	563,452
Watch cases, silver, finished.....	276,211	260,312
Watch cases, gold, finished.....	82,390	824,527
Watches, complete, nickel.....	6,976,655	7,073,513
Watches, complete, silver.....	3,031,048	6,827,623
Watches, complete, gold.....	1,022,948	11,582,276
Chronometers, pedometers, etc.....	32,896	447,735
Other kinds of watches.....	61,237	349,842
Clocks and parts thereof.....	30	11,281
Clocks for public buildings.....	13	1,259
Clocks, antique.....	225	51,761
Alarm clocks.....	4	2,918
Unfinished parts of watches.....	612	452,442
Miscellaneous parts.....	1,591	1,754,744
Total for 1911.....	15,051,590	31,657,165
Increase over 1910.....	2,065,424	3,282,874

The number of finished watches exported in 1910 and 1911 was: 1910—nickel 5,845,004, silver 2,682,469, gold 943,222, total 9,470,695;

1911—nickel 6,976,655, silver 3,031,048, gold 1,022,948, total 11,030,651; increase over 1910, 1,559,916. The export value of finished watches last year was \$25,483,412, an increase of \$3,450,107 over 1910. The number of finished watch movements exported in 1911 was 933,145 movements, valued at \$1,404,433, an increase of 59,613 movements, valued at \$53,856.

The production of gold and silver watch cases and various articles of jewelry made of the same metals is practically under Federal control. The stamp of Government approval is placed upon articles of certain standards for export trade, thereby guaranteeing their merit and quality. The number of watch cases bearing the Government stamp was larger in 1911 than for any previous year.

RESOURCES OF UNGAVA OR LABRADOR.

[From the Canadian press.]

The extension of Quebec Province by the addition of Ungava (the Labrador Peninsula, not including Newfoundland's coastal strip) and the alleged gold discoveries there have brought into prominence a territory about which little is generally known. Senator Edwards some years ago sent skilled men to explore Ungava for timber limits. He told a Senate committee that the information given to the committee cost him about \$30,000 to learn. The senator's firm explored down the Albany River and to Hudson Bay, the Hamilton Inlet district, and all the rivers from the mouth of the St. Lawrence to the head of Anticosti Island. Agricultural prospects are limited. Vegetation is rapid, but agriculture is not likely to be a commercial success.

Back some distance from the Labrador coast and in the immediate valleys of all the streams in that district the timber is large; also in the district around Hamilton Inlet, around Melville Bay, up the Hamilton River, in the valleys of all the rivers running into Hamilton Inlet, and also in the valleys of the rivers extending from Chateau Bay to the head of the island of Anticosti. The timber within these areas is large and good, but the strips do not extend back from the streams for any distance. From half a mile to a mile on each side of the streams would be the extreme.

On the mountains is a vast quantity of perfect timber. The objection to it was that it is scrubby. However, the time will come, if that timber is preserved, when it will be very valuable.

Senator Edwards holds that the Province of Quebec, in this Hamilton River country, has one of the best timber districts on the North American Continent if only preserved, but burning is going on to a tremendous extent, the work of the few settlers there. Valuable areas of timber are being burned. Settlers simply light fires in the summer time to dry the timber for their winter use. These fires extend over vast areas, and enormous portions of the country have been burned. The senator explained that he had taken 500 miles of limits there and allowed them to expire, simply because of the regulations.

On the mountains around Hamilton Inlet there is an enormous quantity of pulp wood. Mr. Edwards said he did not know any place where there is a greater area of pulp wood than on the Hamilton Inlet, around Melville Bay, and for a certain distance into the interior. On the immediate coast of the Atlantic, from Hamilton Inlet to the St. Lawrence, there is no timber.

Senator Edwards described the Grand Falls at Hamilton Inlet as "one of the best water powers in the known world." It has an enormous head—he did not know exactly what. It has a large and never-failing water supply, and from the fact that vessels can get in there, and that there is a large area of pulp-wood country, the district is valuable.

It is possible for shipping to get into Hamilton Inlet for a long period each year. One of the advantages of the territory is its nearness to the British market, it being only a ferry across the Atlantic, as Senator Edwards says.

Tree cotton in Venezuela.—According to Consul Herbert R. Wright, of Puerto Cabello, it is said that a cotton syndicate will soon be established at San Carlos, in the State of Zamora. The consul states that 100 laborers are at work clearing the land, which will be devoted exclusively to tree cotton.

ROPE HORSESHOES IN GERMANY.

[From Consular Assistant Louis G. Dreyfus, Jr., Berlin.]

Owing to the rapid increase in the mileage of streets paved with asphalt and wood blocks and to the congestion of traffic in the large cities it was found necessary to afford greater safety for horses, to prevent their slipping and to enable them to come to a quick stop. This has been attained by fitting them with "rope" horseshoes. These shoes were first manufactured some 25 years ago, but it is only during the last decade that the industry has grown to large proportions.

Various forms and shapes of shoes are used. Some are open at the back, like an ordinary horseshoe. Others are closed; and very often, besides being closed, there is a bridge or crosspiece joining the two sides. When this is the case the bridge is constructed like the rest of the shoe, inclosing a tarred rope. There are usually eight nail holes in each shoe; and in order to strengthen the bottom, and especially to make the nail holes more secure, the walls of the groove are sometimes reenforced by braces. The space in the center of the shoe is often covered over with various kinds of inserts to protect the frog from injury. The latest novelty, which has been adopted by the royal stables, is the insertion at the back of the shoe of a block of wood into which stiff bristles have been driven. This is an additional preventive against slipping. When the ground is covered with snow, a special ice plate is inserted in its stead.

It is customary to use special nails with long heads in attaching the shoes to the hoof. When the long-headed nails are used, it is possible to drive them in and to extract them without taking out the rope. These nails, which are driven between the outer side of the groove and the tarred rope, also help to hold in the rope. The tarred rope wears down simultaneously with the rest of the shoe, and it is only on rare occasions that the rope must be withdrawn and new inserted. This change can be made without removing the shoe. The average life of a rope horseshoe is 6 to 8 weeks.

Advantages and Prices.

The advantages and disadvantages of the rope shoes can be summarized as follows: Advantages—They are light and comfortable for the horse; they help to prevent slipping; they break the concussion and deaden the sound of the hoof. Disadvantages—The driving of the nails requires more care; the blacksmith must have in stock a larger quantity of shoes of various shapes and sizes. Great care has to be taken in the preparation of rope horseshoes not to overheat the iron nor to hammer it when too cold, otherwise it will crack on the anvil.

In addition to the plain tarred rope horseshoes there are shoes in which rope interwoven with wire, wood, rubber, copper, wirework, rush, etc., is used. These are heavier, somewhat more expensive, and less practical than the plain rope shoes, and therefore have not become so well established.

The sale of rope horseshoes in Germany is regulated by the Deutsches Tauhuftisen Syndikat, with headquarters in Berlin. This syndicate, which is composed of the eight principal manufacturers in Germany, was formed in July, 1911, to maintain a uniform price for rope horse-

shoes throughout the Empire. The individual firms in the syndicate are not in any way prevented from quoting different export prices, and it is for this reason that the rope shoes are sold in Germany for 34 marks (\$8.09) per 100 kilos (220.46 pounds) f. o. b. Hamburg in bundles of 20 shoes, unpacked, while the syndicate price is 38.50 marks (\$9.16) per 100 kilos.

There are no firms manufacturing rope horseshoes in this district, but, as mentioned above, Berlin is the seat of the syndicate controlling the industry and some of the large manufacturers have local agencies.

[From Consul Robert J. Thompson, Hanover.]

One Factory in Hanover.

In the Hanover consular district there is but one small factory making horseshoes with rope filling. Horseshoes of the ordinary kind are sold at wholesale by this firm at \$5.50 per 100 kilos (220.46 pounds). The horseshoes with rope filling are sold for \$11.25 per 100 kilos, ordinary and large size, and \$12.50 per 100 kilos for the smaller sizes.

Horseshoes with rope filling have been in use in Germany very generally for the last 15 years, the necessity for their introduction having arisen with the substitution of asphalt paving for the old Belgian blocks, and they are now considered indispensable.

[From Vice Consul Warren E. Schutt, Kehl.]

Practically No Sales in Kehl.

The official veterinarian of the Province of Alsace-Lorraine has informed this consulate that rope horseshoes were once introduced into the district, but that horse owners and farriers found them unsuitable for use here. Consequently attempts to popularize them have been discontinued and at present sales are practically nil.

[The foregoing and reports received from other consular officers throughout Germany were accompanied by sample horseshoes, illustrated circulars in German, or lists of manufacturers and dealers. These are obtainable, upon application, from the Bureau of Manufactures.]

[From Consul George Nicholas Ifft, Nuremberg.]

Their Growing Use in Nuremberg.

Rope horseshoes are coming into general use all over Germany, but especially in the large cities, where there is much asphalt pavement.

Their primary purpose is to prevent slipping during icy or wet weather, but they also find favor from the fact that the rope cushion protects the horses' hoofs on the stone-block or cobble pavements. Practically all smiths here are prepared to fit these horseshoes on demand.

Rope horseshoes are manufactured both from forged iron (pressed steel plate) and cast iron. The first are said to be the more durable and are manufactured only by a Nuremberg firm which owns the patents covering the same. They are made in several forms—light for riding horses and heavy for draft animals. The shoes are very simple and consist of an ordinary horseshoe form with a deep groove on the under surface into which a section of ordinary rope is fitted. This groove is so constructed that, once forced into the groove, the rope remains there without further fastening. The groove is made

for rope about three-fourths of an inch in thickness, and to render the rope more durable it sometimes has a steel wire running through its center.

The use of rope horseshoes in Nuremberg is not large, as the street grades are frequently so steep as to make the use of asphalt for pavement impossible; but the demand is growing. Aside from preventing slipping, the rope cushion lessens the shock of the pressure on the horseshoe nails, which in the ordinary shoe is considerable after the shoe becomes worn down. Even without the rope the deep groove in these shoes makes them much easier on the hoofs, as on soft ground the groove fills with earth, which acts as a substitute for the rope in lessening the shock of the nails on the hoofs.

Cast-iron rope horseshoes are made on the same principle as the forged, but are not manufactured in this district nor in Bavaria.

[From Vice Consul General A. Schlesinger, Munich.]

Popular in Munich.

According to private estimates, about 90 per cent of the hind feet and 70 per cent of the fore feet of horses in Munich are provided with rope horseshoes. These are considered a most practical form of shoe in Munich, but they seem to be employed to only a small extent in the country and are said not to be used by the military authorities. A special kind of rope horseshoe invented in Munich is provided with rope intersected or interwoven with wire, which seems to give greater security from slipping and to last longer than ordinary rope.

HORSESHOE NAILS IN SOUTH AFRICA.

[From Consul E. A. Wakefield, Port Elizabeth.]

The demand for horseshoe nails is fairly good throughout the Port Elizabeth district. Away from the railways, the trek wagon with five to eight pairs of bullocks is still very much in evidence. Horses, mules, and donkeys are used in more populated centers for drawing heavy loads. In the country horses are used chiefly for riding and driving. As the roads are usually quite rough all these animals require frequent shoeing.

Imports of screws and nails into this consular district in 1911 amounted to \$62,000, of which 59 per cent was from Great Britain, 16 per cent from Germany, 10 per cent from America, and 8 per cent from Belgium. The exact figures for horseshoe nails can not be given as they are included with ordinary nails and screws in statistical returns.

The sizes most used are Nos. 5, 6, 7, 8, and 9, with a strong probability of a No. 4 being shortly imported for oxshoes. Packed in boxes of 25 pounds, prices on these nails are: No. 5, \$6.32; No. 6, \$5.60; No. 7, \$5.18; No. 8, \$4.56; and No. 9, \$4.32, with discounts of 62½ per cent and 5 per cent. These prices are quoted f. o. b. in England for one of the best-selling British makes of horseshoe nails.

[The Transvaal market for horseshoe nails was discussed by Vice Consul Charles B. Henderson, of Johannesburg, in Daily Consular and Trade Reports of Apr. 30, 1912. The list of Port Elizabeth and East London importers, also samples of these nails, supplied by Consul Wakefield, may be had from the Bureau of Manufactures.]

SUGAR-BEET CULTIVATION IN UNITED KINGDOM.

[From Consul General John L. Griffiths, London.]

Experiments to ascertain if the sugar beet can be grown successfully in the United Kingdom were conducted by the Board of Agriculture, under the superintendence of the staffs of various agricultural colleges and schools, in 1911, during the summer of which year an abnormal drought prevailed throughout the greater portion of the United Kingdom.

The gross yield in tons per acre varied from 5 to 26.6, the average being 13.2 tons. The estimated net factory weight ranged from 4.5 tons per acre to 18.8 tons, the average being 11.1 tons. The percentage of sugar per ton ranged from 15.8 per cent to 18.5 per cent, the average being 17.3 per cent. The average yield of sugar beets in Prussia last year was about 6 tons per acre. This yield was only a little in excess of that obtained at the poorer experimental stations in England.

Cost per Acre.

The total cost per acre of the sugar-beet crop and a crop of mangolds (when a comparison is possible) is shown below:

Station.	Total cost per acre.	
	Beets.	Mangolds.
Wye.....	\$56.90	.....
Midland.. (College farm.....	52.79	.....
(Other farm.....	47.92	.....
Harper Adams.....	53.25	\$44.51
Cirencester.....	58.20	40.38
Essex.....	44.51	.....
Seale Hayne.....	51.57	.....
Ridgmont.....	46.46	35.51

The average cost of the English sugar-beet crops was between \$46.23 and \$53.53 per acre.

Norfolk Factory—Importance of Industry.

As the result of private initiative, about 3,500 acres in the county of Norfolk have been sown with sugar beet this spring, and a factory is to be built to handle this crop. The capacity of the factory will be 1,000 tons of roots a day. There was little difficulty in obtaining the acreage so that an extensive crop might be planted, as the farmers were very willing to offer land for that purpose.

In view of the increasing consumption of sugar and the fact that the average consumption in England in 1911 was about 82½ pounds per individual of the population, and that the total importation of sugar into the United Kingdom in 1911 was of the approximate value of \$131,395,500 (of which more than two-thirds was beet sugar), the importance of encouraging the British sugar-beet industry will be readily appreciated.

[Other references to sugar-beet culture in England appeared in Daily Consular and Trade Reports on July 18 and Sept. 21, 1910, Mar. 3 and Nov. 22, 1911, and May 22, 1912; and an article on the shortage of sugar in Great Britain was published on Dec. 16, 1911.]

MANUFACTURING BANANA FOOD PRODUCTS IN JAMAICA.

[From Consul Julius D. Dreher, Port Antonio.]

Reports from this consulate on "The 'Banana figs' of Jamaica," in Daily Consular and Trade Reports for July 12, 1911, and on "More banana food companies in Jamaica," in the issue for October 28, 1911, attracted wide attention and brought to this office and to the Jamaican manufacturers of banana food products a great many letters of inquiry from the United States and also from Hawaii, England, France, Germany, and Austria. When the former report was written there was only one factory of any size in operation making banana figs for export; in the latter report it was stated that three other companies were building factories in Jamaica. It may now be said that these three companies and two others are in operation, that another is building a factory, and that one or two other companies have been formed.

New Factories and Various Types of Machines.

The original factory, which has been operating about six years at Gayle, claims to have a secret process for making banana figs. A large factory at Montego Bay had its machinery made after its own designs in New York. Two other companies expect to patent their machines, which have been locally designed and manufactured. It is understood that the drying is done by hot air and that it takes 400 to 500 pounds of fruit to make 100 pounds of the figs. For a good many years experiments have been made in drying bananas, but it has been difficult to find a process for making a product that would keep well. Now that manufacturers are using a variety of machines and apparatus it is to be expected that the best process will soon be known. Although worms are never found in ripe bananas, the preserved fruit if left exposed attracts insects and soon becomes infested with small worms, as is the case also with other dried fruits.

The food products manufactured are fig bananas or banana figs, cooking bananas, banana chips, flour, and meal. All the factories dry or evaporate the bananas whole without the addition of sugar, and yet they are sweet and palatable, like pressed figs, which they also resemble in color. At least one factory cuts the bananas into short pieces before drying or evaporating them, thus making a product that looks much like the dried figs of commerce. It seems that it would be well in order to make a distinction to call the bananas cut into pieces "banana figs" and those treated whole "fig bananas." What are known as "cooking bananas" are so thoroughly dried as to be hard, the color of these being almost white. Broken into pieces they form "banana chips," which not meeting with duties are imported to be ground into meal or flour in the country of consumption. In spite of the fact that the meal is said not to keep well, one Jamaica factory uses an American gristmill for grinding the chips into meal. Another company has its own factory in London, to which it exports the chips to be ground into flour and meal and made into other preparations for market. A small booklet is issued there to set forth the dietetic value of banana foods as attested by British and German food experts and others; and there is added a list of products on sale, with recipes for their use, etc. These banana food products have been awarded many prizes, diplomas, and certificates of merit.

Value of the Banana as a Food.

It seems that all banana food products are wholesome and nutritious. The figs are delicious and are likely to be preferred to real figs by many persons. The fig bananas cut into small pieces may be used like raisins to impart an additional flavor to cakes and puddings. The chips, after being well pounded or ground in a coffee or other hand mill, may be boiled and then used as an excellent breakfast food or for making delicious puddings. Gruel, porridge, and other preparations made from banana flour and meal, which are rich in easily soluble carbohydrates, are recommended for infants, invalids, and dyspeptics. The negro women of Jamaica use banana meal gruel as a substitute for milk for their infant children. The banana itself is one of the most wholesome and nutritious of fruits if eaten slowly when it is perfectly ripe (that is, just before it decays), but not when devoured only half ripe, as is often the case in the United States, which causes many persons to regard bananas as being difficult to digest.

It seems only necessary to make the value of banana food products known in order to create a large market for them. Already they are to a considerable extent popular in Germany and Great Britain, which have been taking the bulk of the exports of such products from Jamaica. When bananas are selling at a low price, as is usually the case in this colony during the fall and winter, it is quite profitable to use them for manufacturing purposes. As the world's demand for these products increases it is to be expected that bananas will be grown extensively in districts too remote from shipping ports or railroad facilities to make their exportation practicable. In Jamaica several factories have already been built in such districts. In banana-producing countries far removed from large markets, like the Society and the Samoan Islands and other island groups in the Pacific Ocean, this fruit could be grown at small expense for manufacturing food products. Especially adapted to such an undertaking is Tahiti, the principal island of the Society Group, which has steamship communication with San Francisco and New Zealand and Australia, all too distant for exporting the fruit itself to advantage except in vessels built especially for that purpose. The Hawaiian Islands and the Philippines also seem to offer inviting fields for the profitable manufacture and exportation of banana food products. This consulate has received an inquiry from Honolulu with regard to this method of using bananas.

Supply, Output, and Packing.

Owing to the high price paid in Jamaica for bananas for export to the United States from March to July, inclusive, the factories either discontinue operations during those months or use mostly the small unmarketable bunches of fruit for manufacturing purposes. In order to have a continuous supply of fruit several companies are making arrangements to grow bananas for their own use. Owing to the prevailing high price of bananas, one company could not undertake to fill a recent order for 100 tons of chips. Another company, which could not accept orders from importers in the United States last fall because its entire output was under contract for shipment to Europe, is taking steps to enlarge its factory in order that it may be in a position to meet the increasing demand. So far as can be ascertained, the combined capacity of the Jamaica factories is 12 to 15

long tons a week; but the output may be considerably increased by next winter. The fig bananas, the chief article produced, are generally packed for export in boxes of 56 pounds each (one-half of a British hundredweight), though some are put up in 1-pound packages. There is no export duty on banana food products. The retail price of the figs in Jamaica is 8 to 12 cents a pound and the export price for figs or chips is about \$150 a long ton (2,240 pounds). Samples may be obtained from the factories.

As the manufacturers complain that most of the letters of inquiry from the United States come short-paid, it may be well to state that although Jamaica is a British colony the correct letter postage from the United States is 5 cents; and that when only a 2-cent stamp is used it costs 3 cents deficient and 3 cents penalty postage, or 6 cents in all, to take such a letter from a Jamaica post office.

[With his report the consul has sent samples of banana foods. He has also given the name of the New York manufacturing firm and the addresses of the London factory and the Jamaica companies referred to in his report. These are all obtainable from the Bureau of Manufactures at Washington.]

ROUMANIAN AGRICULTURAL STATISTICS.

[From American Minister John B. Jackson, Bucharest. See also Daily Consular and Trade Reports for Apr. 3, 1912.]

Roumania's agricultural production in 1911 had a total value of \$269,042,000, which was \$17,273,500 more than in 1910. Cereals made up about 83 per cent of the total, with a value of \$224,266,000, of which wheat formed \$90,517,000 (about 1 per cent less than in 1910), maize \$79,072,100 (25 per cent more than in the preceding year), barley \$16,366,400, oats \$10,518,500, and rye \$3,647,700. The value of the oleaginous and textile plant crop was \$3,975,800, of which \$2,142,300 represented colza (rape) and \$1,351,000 flax. The average price of wheat was \$3.47 per 220.46 pounds; of maize, \$2.66; barley, \$2.88; oats, \$2.61; rye, \$2.84, and colza \$5.08.

Among the vegetables the bean crop was valued at \$144,750 and the potato crop at \$1,775,600, sugar beets at \$1,254,500, tobacco \$1,302,750, garden vegetables \$3,203,800, and fodder plants \$15,613,700.

The wine harvest represented a value of \$8,916,600 (about a third more than in 1910) and the prune harvest \$1,872,100—less than half that of the preceding year, owing to the fact that prune trees are being cut down to make room for more profitable crops.

Sale of Bleached Flour.

The State Department of Agriculture of South Carolina has issued a notice that, after July 1, flour offered for sale in that State, bleached by any process, must be labeled "Bleached" in letters not less than one-half inch in height. The State inspectors have been instructed to enforce the law. Many States of the United States have similar provisions regulating the sale of this article, while still other States follow the Federal regulations as laid down in the "Notice of Judgment No. 722, food and drugs act of June 30, 1906." Copy of this notice can be obtained by addressing the United States Department of Agriculture.

PRODUCTION OF MEAT IN FRANCE.

[From Consul Louis Goldschmidt, Nantes.]

Better methods of feeding and breeding have wrought much improvement in French cattle in the last half century. Whereas in 1862 oxen were generally slaughtered at an average age of 8 years, they are now killed at 4 years and 6 months; besides, the average yield of meat has increased from 225 kilos (496.04 pounds) to 365 kilos (804.69 pounds).

Thirty years ago sheep were slaughtered at 3 years; now they are killed at 2 years and 2 months, and the average yield of meat per sheep is to-day 21 kilos (46.3 pounds) instead of the former 18 kilos (39.68 pounds). Hogs are slaughtered at 10 months instead of 14, and they yield about 100 kilos (220.46 pounds) of meat against 88 kilos (194 pounds) formerly.

According to official statistics, the number of horned cattle in France increased 1,500,000 head during the 47 years from 1862 to 1909. The number of hogs rose from 6,047,543 to 7,505,850 during the same period. On the other hand, a decline is shown in the number of sheep which, in 1862, was 29,500,000, and in 1909, 17,350,000. This latter decrease is due to the modification of agricultural conditions, to the increasing difficulty in finding good shepherds, etc. It is, however, stated that the number of sheep is much larger than that shown by official statistics.

Production and Consumption.

The production of all meat in France is also steadily increasing as is shown by the following figures, the quantities representing metric tons of 2,204.6 pounds: 1862, 1,161,218 tons; 1892, 1,570,945 tons; 1897, 1,920,400 tons; 1909, 2,311,778 tons. The increase thus shown is 1,150,560 metric tons, or 99 per cent, while the number of animals has been increasing in a less proportion.

From these figures the annual per capita consumption of meat in France can be adduced: 1862, 57.1 pounds; 1892, 91.18 pounds; 1897, 111.27 pounds; 1909, 125.68 pounds.

To sum up the situation, it is considered that French agriculture is able to supply its national demand for meat, and that it may even be in a position to export cattle. But in spite of the increase in production of animals, all kinds of meats have increased in retail prices 25 to 50 per cent of their value 20 years ago.

SANITARY SUPPLIES FOR JAPAN.

[From Consul George N. West, Kobe.]

In Kobe, as throughout Japan, there is no sewerage system. There are waterworks owned by the municipality, which puts the pipes, etc., into houses needing them and also does all the repairs. It might be advisable for American firms desiring to sell their outfits to send catalogues to the mayors of the larger cities. Outside of the foreign hotels, the Kobe Club, and a very few of the foreign houses, there are no lavatories, water-closets, bathtubs, etc., such as are in use in America. The bathtub in almost universal use is made of wood, and the water is heated by a small charcoal stove. Only one firm in Kobe deals in sanitary goods and plumbing supplies. Its address will be found in the World Trade Directory issued by the Bureau of Manufactures.

INDUSTRIES SUBSIDIARY TO THE CHAMPAGNE TRADE.

[From Consul W. Bardel, Rheims, France.]

There are in this consular district of France, and particularly in the city of Rheims, a number of enterprises which, while only accessory to the principal industry, that of making champagne wine, are quite important in themselves.

Chief among these auxiliary industries is the manufacture of champagne bottles, whose production is fraught with many difficulties. The champagne bottle has to be constructed in all its parts of an almost mathematical even and heavy thickness; its glass must be perfectly smooth and unaffected by the acids contained in the wine; its neck must be exact in every particular, to insure perfect corking, and with no grain or projecting points on the inside. So much progress has been made within the last 10 or 15 years that, where formerly a breakage of 5 per cent was considered very small, at the present time the average breakage does not exceed 1 per cent. Despite the perfection as to strength reached in the production of champagne bottles, the strain upon them caused by the pressure they sustain and the repeated handling they undergo weakens them to such an extent that it is considered unsafe to use the bottles a second time; and, with the exception of smaller houses making the cheaper brands, champagne manufacturers place their wine in none but entirely new bottles.

Rheims Bottle Works—Corks—Boxes and Baskets.

Four glass-blowing establishments in this city, of which one is among the largest in France, and several others in the northern part of the Rheims consular district make almost exclusively bottles for champagne wine. They work night and day in three shifts of 8 hours each and turn out about 40,000,000 bottles annually. While machinery is now applied in the manufacture of bottles for still wine, liquors, medicine, etc., no machine has as yet been invented which could supersede manual labor in the manufacture of champagne bottles. The men performing this difficult work are well paid.

Another important industry of this consular district entirely dependent on the wine trade is the manufacture of corks for champagne bottles. The material for these corks is principally imported from Spain, in which country is found a tree whose bark is resistant enough to permit of its use for this class of corks. The work of dressing and testing the bark and completing the cork is in the hands of very skilled workmen, most of whom are well-paid Spaniards. Since it is very difficult to procure a bark thick enough to make a good cork out of one piece, a number of the corks made nowadays are composed of two pieces of thin bark pasted together lengthwise. This process of pasting the pieces together is patented; and since the corks thus made seem to answer in every respect the demands made upon them, a number of cork manufacturers are now working under this patent, apparently with very good success. There are about 20 cork manufacturers in this district turning out annually 100,000,000 corks, of a value between \$1,351,000 and \$1,544,000.

Local woodworking establishments supply the champagne houses with the boxes in which the wine is shipped to foreign countries. These are made in a mechanical way; and while they are very sub-

stantial, they are of a superior finish and give remunerative occupation to many workmen. Several large willow-working manufacturers furnish champagne houses with the baskets in which the wine is shipped to places in France and in near-by countries.

Straw Jackets—Machinery, etc.—Good Crops Needed.

Several firms make a specialty of the straw covers in which the bottles are encased before being packed in boxes or baskets; the straw used for these covers is cut and sewed by machinery. This industry encourages the cultivation of rye in this immediate neighborhood, the straw being used for the manufacture of the covers and the rye sold to other countries, mostly to Germany.

Two firms in this city and four at Epernay construct special machinery for the manipulation of champagne wine, such as automatic bottling machines, machines for cleaning, for corking and uncorking, for wiring bottles, etc. Presses for extracting the juice from the grapes are made by several important concerns in this consular district. (Some hydraulic presses have recently been brought from the United States.) One large concern makes a specialty of manufacturing metallic capsules and tin foil for champagne bottles, and numerous lithographic establishments are engaged in producing artistically decorated labels.

It is safe to say that the aforesaid industries give employment to more than 5,000 skilled workmen. For their future prosperity much depends upon abundant harvests of grapes, the crops during the last five years having proved to be so insufficient that only several good yields will prevent the champagne trade and its auxiliaries from suffering a very severe setback.

MANCHURIAN FREIGHT CHARGES ON BEANS.

[From Consul Albert W. Pontius, Dalny.]

The first deal of the season in junk beans was recently concluded on the Newchwang market. The junk freight on beans from Mafengkow to Newchwang, which was quoted at 10 tiaos per koku (koku = 5.118 bushels) at the outset of the season has risen by $\frac{1}{2}$ tiao, so that the transportation of 160 koku (equivalent to a railway carload of 30 short tons), including commission to junk owners and other charges, now (Apr. 30) costs 238.87 yen (\$118.96). By railway from Tiehling to Newchwang the rate is 253.65 yen (\$126.32), or 14.78 yen (\$7.36) more per carload than by water.

Of course, the quicker transportation and perfect safety of the goods guaranteed by the railway transportation must be taken into consideration as an advantage over the waterway carriage, which, besides taking eight days for the trip, exposes the beans to the danger of getting wet in transit, or to the molestation of bandits.

International Congress of Tachygraphy.

The Spanish Minister at Washington announces that the Tenth International Congress on Tachygraphy, organized by the Spanish Tachygraphic Federation, will be held at Madrid September 26 to October 2, 1912. An invitation is extended to the stenographers of the United States to take part in this congress.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8983. Pipes for water mains.**—An American consul reports that a Latin-American municipality is about ready to install new pipes for its entire water system and desires to buy several carloads of pipe from 6 to 12 inches. Prices on this material are desired as soon as possible. All correspondence should be addressed to an individual named in the report.
- No. 8984. Locomotives and passenger coaches.**—A report from an American consular officer in a European country states that a railway company in his district is in the market for two locomotives and six modern passenger coaches. Specifications, etc., can be secured from an individual whose name is given in the report. The amount to be expended will be about \$54,000.
- No. 8985. Bank furniture and fixtures.**—A European bank is constructing a new office building for its own use. No imported materials will be used in the structure itself, but new office furniture, bank fixtures, safes, and vaults will be required. An American consul writes that American vaults are in great favor owing to the way in which they have withstood fire in several recent disastrous conflagrations in the United States. All communications should be addressed to the manager of the bank.
- No. 8986. Hardware and engineering specialties.**—A business firm in the United Kingdom has informed an American consulate that it is interested in hardware and engineering specialties. This concern has good trade connections among ironmongers, hardware merchants, mill furnishers, engineers, and machinery merchants in the country. It would like to get in touch with American manufacturers of small tools for engineers, hardware and house furnishers, and domestic specialties of every description.
- No. 8987. Machine guns.**—An Asiatic government is in the market to purchase one or more small caliber machine guns. An official informs an American consulate that offers from German and English firms have been received, but he has agreed to wait a reasonable time in order that American firms may forward catalogues and prices. These should be sent as soon as possible.
- No. 8988. Club furniture and fixtures.**—An American consul reports that a club in his district will shortly erect a new clubhouse. There will be no opening for the sale of American building materials, with the exception, perhaps, of some parquetry flooring, but the usual club fixtures and furniture will be required, such as leather upholstered furniture, dining room furniture, office furniture, billiard tables, lockers, etc. Communications and advertising matter, both in Spanish, if possible, should be sent to an address given in the report.
- No. 8989. Motor-car service.**—A contract has just been signed between a Latin-American government and a business man for the establishment of a freight and passenger motor-car service to run through several towns, a distance of 228 miles. This contract is made for 30 years and works must be started within a year after the approval of the same. An American consul writes that this service should prove of great value to the farmers by furnishing transportation facilities for their products. It might be to the advantage of American manufacturers of freight and passenger cars, accessories, material for station buildings, etc., to correspond with the holder of this contract. Communications should be in Spanish.
- No. 8990. Woodworking machinery, engines, and boilers.**—An American consul reports that he recently had an interview with the representative of the principal exporter of lumber from his district, as well as the principal sawmill owner. At present he owns four mills and is erecting a fifth; also a modern veneer factory, the machinery of which is entirely of American manufacture. A request is made that this owner be supplied with a full line of catalogues covering all kinds of woodworking machinery, including door and sash, as well as box and barrel machines, also cheap portable and semiportable boilers and engines, many of which are manufactured in the United States. At present there is only one band saw used, owing to the lack of skilled labor in handling such machines, and all the mills are equipped with gang or frame saws of European manufacture. Copy of the complete report, giving further particulars, will be sent to interested firms by the Bureau of Manufactures.

DAILY CONSULAR AND TRADE REPORTS

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GERMAN AIR CRAFT AND AUTOMOBILE INSURANCE.

[From Consul General A. M. Thackara, Berlin.]

The underwriting of aerial risks has been carried on in a tentative way and as a side line by several German life and accident insurance companies for two years or more. The results of experience to date appear not to have been altogether encouraging to these companies, and all are now carefully circumscribing the scope of their operations. Conditions attending insurance against liability for damages arising from injury to persons and property have been made highly restrictive; the rates for the insurance of aeronauts (those who go up in lighter-than-air craft) have recently been increased; the insurance of aviators (those who go up in heavier-than-air craft) against death seems to have been abandoned altogether; and the number of aerial policies of any kind which are now being written is said to be very small.

One of the companies which had earlier ventured into insurance of aviators against death recently paid a \$12,000 claim arising from such a policy, and in addition a considerable amount to cover the loss on the aeroplane, which was destroyed.

Aviator's Insurance Found Unprofitable.

A Swiss insurance company which does an accident business in Germany, including automobile insurance, etc., has recently abandoned altogether the insurance of airmen and air craft. During the two years in which it experimented in the field of aerial insurance it wrote about 100 policies. For insurance against death, it charged an annual premium of \$110 for a \$2,380 policy, and the same premium for accident insurance, giving a daily remuneration of \$2.40 during invalidity. Although these rates were increased later, the company found the business unprofitable. It is said to have sustained especially heavy losses in one aeroplane catastrophe. A Cologne company, one of the pioneers in the field, has almost entirely abandoned the writing of aerial policies.

None of the local companies will now quote rates for the insurance of aviators against death. The rates for accident insurance for avia-

tors are \$2.38 for a \$238 policy and \$4.76 for a policy yielding a daily remuneration of 24 cents a day during invalidity.

The rates for the insurance of aviators against liability for damages arising from injury to other persons range from \$29.75 for a policy paying a maximum of \$5,950 when one person is injured or \$17,850 when more than one is injured, to \$47.60 for a maximum of \$23,800 for one or \$71,400 for more than one person injured. The rate for insurance against liability for damages to property is 20 per cent of the value of the policy, when damages from fire or explosion are not included, and 30 per cent when such damages are included. The minimum premium is \$2.38 and the maximum liability \$2,380. The rules governing this form of insurance are in general the same as those usually covering other forms of insurance against liability for damages.

Increased Rates for Aeronauts.

Owing to the discouraging experience which the companies have had with this form of insurance, the rates charged for aeronauts have recently been raised. They are as follows:

Classification.	For \$238 death policy. ¹	For \$238 accident policy. ¹	24 cents per day remuneration policy. ²
Dirigible balloons: ³			
Each ascension	\$6.00	\$6.24	\$6.36
Motorless balloons:			
1 trip	1.79	.45	.71
5 trips per year	4.46	1.79	2.68
More than 5 trips per year	5.95	2.38	3.57

¹ Maximum insurance, death or accident, \$4,760.

² Maximum remuneration policy, \$4.76 per day.

³ Effective only if ascension is made in Zeppelin, Parseval, Gross, or Clouth airships.

Insurance against accident of those who go up in motorless balloons, as in the case of aeroplane accident insurance, is usually written in connection with ordinary accident insurance. The rates for this combined insurance are the same as for ordinary accident insurance, plus the rates quoted above.

Automobile Insurance—General Field of Companies.

There are about a dozen companies represented in Berlin which write automobile insurance. Their field includes (1) insurance of the owner against liability for damage to persons or property, (2) insurance of the automobile against damage from accident, fire, explosion, theft, etc., (3) insurance of passengers taken on a tour, (4) insurance of tires, (5) insurance of baggage carried, (6) insurance of chauffeur, and (7) insurance of automobile for safe transportation.

It is the rule that insurance written in Germany is valid only in continental Europe. An extra payment is generally required for insurance written to cover the British Isles.

The premiums charged for insurance against liability for damages are scaled according to the taxable horsepower of the automobile. For such insurance the law specifies \$2,380 as the maximum limit of liability for damage to property, \$11,900 as the maximum limit of liability for damage to one person, and \$35,700 as the maximum limit of liability of all kinds for any one accident. On this basis the yearly

premiums charged by four companies represented in Berlin for policies written on privately owned automobiles are as follows:

Classification.	Premium.	Classification.	Premium.
First company:		Third company:	
1 to 7 horsepower.....	\$16.66	1 to 6 horsepower.....	\$22.49
8 to 13 horsepower.....	26.18	7 to 12 horsepower.....	32.13
14 to 25 horsepower.....	33.32	13 to 25 horsepower.....	51.41
Over 25 horsepower.....	42.84	Over 25 horsepower.....	53.55
Second company:		Fourth company:	
1 to 6 horsepower.....	27.37	12 to 25 horsepower.....	47.60
7 to 12 horsepower.....	35.70	Over 25 horsepower.....	59.50
13 to 25 horsepower.....	47.60		
Over 25 horsepower ¹	59.50		

¹ For members of automobile clubs only; special rates to nonmembers.

Insurance Against Bodily Injury, Damage, Fire, Theft, etc.

For a policy specifying \$23,800 as the limit of liability for bodily injury to any one person one company charges members of automobile clubs the following yearly rates: From 1 to 6 horsepower, \$26.98; 7 to 12 horsepower, \$38.56; 13 to 25 horsepower, \$51.41; over 25 horsepower, \$64.26.

Another company offers the following rates for a policy specifying \$23,800 as the limit of liability for bodily injury to any one person and \$71,400 as the limit of liability arising from any one accident: From 1 to 6 horsepower, \$32.84; 7 to 12 horsepower, \$42.84; 13 to 25 horsepower, \$57.12; over 25 horsepower, \$71.40.

For a policy limiting liability for bodily injury to any one person to \$119,000 and liability arising from any one accident to \$238,000, the same company offers the following: From 1 to 6 horsepower, \$41.06; 7 to 12 horsepower, \$53.55; 12 to 25 horsepower, \$71.40; over 25 horsepower, \$89.25.

The usual yearly premiums charged for the insurance of automobiles up to their full value against damage, fire, theft, explosion, etc., are reported to be as follows, the premiums being based on a scale of valuations ranging from 7,000 to 30,000 marks (\$1,666 to \$7,140): Up to \$1,666, \$68.31; from \$1,666 to \$2,380, \$95.68; from \$2,380 to \$3,570, \$124.95; from \$3,570 to \$4,760, \$169.46; from \$4,760 to \$7,140, \$202.30; and over \$7,140, \$285.60.

New automobiles are usually insurable at somewhat reduced rates. It is also usually provided that, if premiums for five years are paid in advance, no premium is charged for the sixth year.

Club Rates Lower.

Members of automobile clubs customarily enjoy somewhat lower rates than nonmembers. Automobile clubs also make special arrangements with insurance companies governing all features of insurance. Under one such agreement the rates for insurance against liability for damages arising from bodily injury, limiting (policy 1) to \$11,900 for one person hurt or \$35,700 for more than one, and (policy 2) to \$23,800 for one person hurt and \$71,400 for more than one, are as follows:

Classification.	Policy 1.	Policy 2.
Up to 6 horsepower.....	\$22.49	\$26.99
6 to 12 horsepower.....	32.13	38.56
12 to 25 horsepower.....	42.84	51.41
Over 25 horsepower.....	53.55	64.26

The rates for insurance against liability arising from damage to property with the liability limited to \$2,380 are the same as those given under policy 1.

The rates for the insurance of an automobile against damage range (for \$1,071 of insurance) from (1) \$48.20 covering in full, \$43.38 excluding damage incurred while touring in a foreign country and damage to tires, \$38.56 without personal insurance, and \$34.70 with a personal insurance of \$12, up to (2) \$208.85 covering in full, \$176.72 excluding damage incurred while touring in a foreign country and damage to tires, \$144.59 without personal insurance, and \$130.13 with \$12 personal insurance.

The foregoing are the rates for automobiles which are not more than two years old. For cars two to four years old the company may charge the same rates, or others not more than 25 per cent in excess thereof. For cars four to six years old the rates may not exceed those for new cars by more than 33 per cent, and for cars older than six years the excess may be not more than 50 per cent.

Club Rates for Accident Insurance.

Accident insurance under this club agreement is classed under three heads: (1) Insurance of owner, (2) insurance of chauffeur, and (3) insurance of touring passengers. The insurance of the chauffeur may be (policy A) against accidents suffered while doing any work connected with an automobile in the service of the insured; (policy B) against any accidents in the service of the insured; and (policy C) against any accidents in or out of the service of the insured. The premiums chargeable, in accordance with this agreement, for each of the above kinds of accident insurance, are as follows. The rates for death are quoted per each \$238 of insurance, and for injury (class 1) for each \$238 of cash payment and (class 2) for each 24 cents of daily remuneration.

Kind of policy.	Premium.	Kind of policy.	Premium.
Insurance of owner or touring passengers:		Insurance of chauffeur—Continued.	
Death.....	\$0.14	Policy B—	
Injury—		Death.....	\$0.24
Class 1.....	.19	Injury—	
Class 2.....	.55	Class 1.....	.35
Combined.....	.88	Class 2.....	1.75
Insurance of chauffeur:		Combined.....	2.38
Policy A—		Policy C—	
Death.....	.21	Death.....	.20
Injury—		Injury—	
Class 1.....	.32	Class 1.....	.40
Class 2.....	1.61	Class 2.....	2.07
Combined.....	2.14	Combined.....	2.76

When in case of accident there are more passengers in the car than are provided for in the accident policy, the liability for each passenger decreases in proportion as the number of passengers actually in the car is greater than the number provided for in the policy.

The rates of premium for injury apply to the payment of annuities; for the payment of cash down an extra payment of 50 per cent must be made.

[A partial list of the companies writing automobile and aeroplane insurance represented in Berlin, a translation of the terms of insurance offered by one company, and a translation of portions of the German automobile law, forwarded by Consul General Thackara, may be obtained from the Bureau of Manufactures.]

CANADIAN REGULATIONS FOR MOTOR TOURING.

[From Consul Fred C. Slater, Sarnia, Ontario.]

As a large number of Americans with automobiles tour this part of Canada every season, the substance of the principal regulations for the Province of Ontario is presented:

1. The driver must be at least 18 years of age, and in no way intoxicated.
2. Any person operating an automobile for gain or hire must be licensed to do so; and no person may employ another for that purpose unless so licensed.
3. No automobile is allowed on the public highway unless provided with a provincial license and number, which cost \$4 per calendar year.
4. At all Canadian ports of entry will be found a customhouse broker who provides foreign tourists with auto licenses. Ordinarily this broker is the representative of a bonding company, and will bond cars against interference by the customs for six months, for which the deposit is \$10. The tourist is given a copy of this bond, and upon finally returning out of the country, he should have the customs at outgoing port certify that fact upon the copy. This copy should then be sent to the issuing broker, who sends the release of bond obligation and \$5, keeping the other \$5 for his services.
5. The auto must be provided with a gong or horn and suitable lamps.
6. No other number than that of the provincial license may be exposed, and must be kept clear and plainly visible. No searchlights are permitted.
7. The maximum speed within city limits is 15 miles per hour; in country, 20 miles. But drivers are enjoined to slow down whenever the exigencies require it. Upon passing a team, slow down to 7 miles; and when going in same direction sound the gong and give driver an opportunity to turn aside. Upon meeting a funeral, turn aside as much as possible and stop until it has passed.
8. If an accident occurs to any person on foot, horseback, or in a vehicle, owing to the presence of the automobile, the person in charge thereof must go back to the scene of the accident and give in writing to the person sustaining loss or injury the name and address of the owner of the motor vehicle and number of license.
9. In case of injury or damage the onus of proof that the same did not arise through the negligence of the driver of the automobile rests upon the owner or driver thereof.
10. Violations of any of these regulations are punishable by fine or imprisonment, or both. Any police officer may in good faith make arrests without a warrant; and "every person may arrest without a warrant any person whom he finds committing any such offense" above referred to.

PRINTING OFFICES IN HONDURAS.

[From Consul A. T. Haeblerlé, Tegucigalpa.]

The principal printing office in Tegucigalpa is the Government establishment, equipped with 3 cylinder and 6 pedal presses. A bookbindery employing 9 men is maintained in connection with the printing office, the total number of employees being 80. This office prints everything of an official character; also *El Nuevo Tiempo*, the only daily paper in this city, and accepts orders for job work from people throughout the country. The building is valued at \$24,457, the presses at \$15,319, and the accessories at \$16,581. The book-binding machinery is valued at \$1,158 and the accessories at \$466.

Besides the Government establishment, there is a small job printing office equipped with several pedal presses and owned by a resident of Tegucigalpa, who imports paper and cards and is especially interested in plain and fancy stationery. In addition, a small press is owned by another citizen who edits a small monthly paper, *El Boletín Comercial*, in connection with his business. Occasionally brief articles on agriculture appear in this paper, as the owner is interested in the agricultural development of the country. [The names of these two citizens and of the officials in charge of the Government printing office may be obtained from the Bureau of Manufactures.]

BÊCHE DE MER IN CHINA.

[From Consul General George E. Anderson, Hongkong.]

The possibility of developing a considerable trade in bêche de mer, bicho de mar, or trepang, as it is variously known, between the Philippines and China by way of Hongkong merits the attention of Philippine business men. The imports of the product into China for some years past have averaged about a million taels in value, of which Hongkong furnishes generally somewhat more than half and Japan about two-thirds of the balance.

The value of the trade generally and the proportionate share of the markets concerned in it appear from the following table of imports of bêche de mer into China:

Sources.	1908	1909	1910
Hongkong.....	\$400,882	\$323,750	\$333,788
Japan.....	283,702	264,473	277,876
All other countries.....	71,735	98,426	118,634
Total.....	815,299	686,651	730,298

Sources, Grades, and Prices.

The Philippines exported bêche de mer to China, and to Hongkong for China, in the fiscal year 1911 to the value of \$36,615 gold, in contrast to \$392 the year before and none previous thereto. The total exports of the product from the Philippines to all countries in the fiscal year 1911 amounted to \$50,723, as compared with \$7,274 in the previous fiscal year and \$5,096 in 1909.

The imports of bêche de mer through Hongkong come largely from Burma and the East Indies, the north coast of Australia, the South Sea Islands, Indo-China, the Straits Settlements, New Guinea, and from the tropical Pacific islands generally, notably from coral reefs. The product is a sea slug embracing several species of the echinoderms. These sea slugs are 6 to 15 inches long, are shaped somewhat like cucumbers and are sometimes referred to as sea cucumbers, and the several varieties come with or without ambulacral feet, known in the trade as teats.

In general, five varieties or grades are known in the trade. The first grade or prime variety is the "brown with teats"; the second "large black"; the third, "small black"; the fourth, "red bellied"; and the fifth, "white." The smooth varieties or grades are also known as "closed" and those with the feet as "open" slugs. The more general divisions in the trade are into red and black.

Prices vary from year to year and for the different grades, running from \$25 to \$150 local currency per picul of 133½ pounds. The product as received here and as generally handled in large quantities is then sorted into as many as 25 grades, these being sold on the Hongkong market to-day (April 9) at prices ranging from \$11.10 to \$213 local currency per picul, the local dollar to-day being valued at about 47 cents gold. Shipments of fair grade stock in good condition generally bring approximately 15 cents gold per pound. The Chinese customs valuation for all imports in 1910 was at the rate of 15 cents gold per pound.

How Prepared—Uses—Trade Methods.

There is immense variation in the condition of the product, however, which affects prices. The slugs are cured by being boiled

whole for some time, after which they are cleaned and then dried in the sun or over a quick fire. They absorb moisture very readily after drying, so that unless they are properly packed they become damp and spoil rapidly. A considerable quantity of the goods arrives in Hongkong in bad condition.

Bêche de mer is used all over China and is very popular in making soups and similar dishes. The consumption in general is proportionate to the population, Tientsin and Shanghai importing largely for their respective trade territory in North and Middle China and other ports in varying proportion according to their population, wealth, and proximity to the sea. Even Chungking imported \$41,580 worth in 1910.

The goods are handled in Hongkong largely by some of the import commission houses which make a specialty of the trade and by Chinese firms dealing direct [whose names are obtainable from the Bureau of Manufactures]. The bulk of the business has long been done by a few firms which have a well-established clientele and sell for well-established collecting markets elsewhere. They are disposed to protect their present trade and buy only of old-time markets, so that it is difficult for new trade to be started.

FANCY PRICES FOR OSTRICH FEATHERS.

[From Consul E. A. Wakefield, Port Elizabeth, South Africa.]

The highest prices paid for ostrich feathers in years in the Port Elizabeth market were obtained on April 30. These feathers, prize winners, specially selected and exhibited for show purposes, were placed on sale and following were some of the prices per pound realized: Primes (whites), \$487, \$353, \$328.50, \$296.85, and \$194.66; feminas, \$109.50 and \$97.35; spadonas, \$47.45 and \$34; fancies (byocks), \$76.65. These are of course above the actual market value by a considerable margin. Prize-winning feathers always reach a fancy figure on the market largely as a matter of sentiment. This year, however, the prices were unusually high and with one exception were the highest ever obtained in this market.

Mexican Excursion to the United States.

Consul A. J. Lespinasse, of Frontera, Mexico, announces that an excursion has been planned under the auspices of the Chamber of Agriculture of Tabasco, to be composed of the leading business men and planters of that State, for the purpose of visiting the principal commercial and industrial centers of the southern and southwestern sections of the United States. Efforts will be made to secure all possible data relative to the most modern business and agricultural methods now in use in the United States.

Navigation in the Aegean Sea.

The American Embassy at Rome communicates, under date of June 1, the substance of an announcement by the Italian Foreign Office to the effect that access to the islands of the Aegean Sea occupied by the Italian forces is forbidden during the night to all neutral vessels.

TRADE NOTES FOR NORTH CHINA.

[From Consul General Samuel S. Knabenshove, Tientsin.]

Shipments from New York to Tientsin.

Freight from New York and other Atlantic ports for Tientsin and Shanghai usually comes by freight steamer through the Red Sea. The larger of these steamers do not come to Tientsin, but discharge their Tientsin freight at Shanghai into coast steamers, which bring it here. Export agents in New York will furnish the names of freight steamers bound for the China coast.

Silver Purchases for China.

Request is made for the prices at which silver bullion or new Mexican silver dollars would sell if consigned to China. While China is on the silver standard, the price of silver as measured in gold fluctuates every day, and it is impossible to give any figures which would be of the least value.

The price of silver in China is governed by the price of silver in London and New York, rising and falling therewith. I made inquiries at the leading foreign banks in this city. They all said that they buy silver in the London and American markets through their bullion brokers, and receive no consignments from individuals. The principal banks here have branch offices in New York City and agents at San Francisco, and they all suggest that Americans having silver to sell should communicate with some of the large bullion-broking firms either in New York or San Francisco, by which the best prices would be obtained. There are no duties, taxes, or impediments of any kind imposed by the Chinese Government on the import of silver.

New Telephone Lines Will be Installed.

The telephone mileage in Tientsin on December 31, 1911, was 2,122, and number of stations 1,831—increases of 40 miles and 33 stations in 12 months. The figures for Tientsin will be practically stationary for the present year, owing to the fact that the switchboard is filled, and there can be no increase in number of stations until the entire telephone system of this city is rebuilt. It is intended to undertake this work as soon as possible this year, but even though the new material were ordered immediately the new system could not be in operation until some time in 1913.

In Peking on December 31, 1911, there were 2,136 telephone subscribers, an increase of 505 in 12 months, while 1,434 miles of bare wire and 5,056 miles of cable core were in use. The unsettled condition of business at present and the lack of capital alone prevent a very great increase in the use of the telephone. The Chinese in Tientsin and Peking thoroughly understand the advantage of telephonic communication, and it is only a question of time, plus normal business conditions, to witness an extraordinary development. The trouble in this country is the lack of long-distance lines, the longest at present being about 120 miles.

Automobiles in Tientsin and Peking.

The motor-car business is in its inception in North China. Up to a year ago there were only about a dozen motor cars in North China. These were owned in Peking and Tientsin, they being the only cities which have improved roads on which cars are available. Through

the efforts of this office, a little over a year ago a local importing firm was induced to take an agency for an American motor car. It brought out three touring cars as a trial order. These became popular, and up to date the firm has disposed of 16 American cars. This firm also established a garage and repair shop. Seeing its success, a British firm has just established a garage and repair shop, and has taken an agency for a foreign car. There is no garage nor repair shop in Peking.

There would be an enormous market for motor cars in China if the country possessed suitable roads. The roads all through North China are simply cart tracts winding over the country, and have no modern improvements. The streets of the native cities, except Tientsin and Peking, are too narrow to use cars. The streets are from 8 to 12 feet wide, without sidewalks and without macadam or paving. In the foreign concessions of Tientsin and in the newer portion of the native city there are wide, well-macadamized streets, about 50 miles in all. In Peking there is about the same mileage of streets available for motor traffic, including a road to the Summer Palace, 18 miles from the city.

CANADIAN STIMULATION TO SHEEP INDUSTRY.

[From Montreal Gazette.]

Hon. Martin Burrell, Canadian Minister of Agriculture, has appointed Prof. T. R. Arkell, professor of animal husbandry in New Hampshire Agricultural College, to examine into the general condition of the sheep industry in Manitoba, Saskatchewan, and Alberta. Prof. Arkell is a Canadian and a graduate of Guelph Agricultural College. He has made a specialty of the question of sheep breeding and the wool industry.

Prof. Arkell proceeds to Lethbridge about June 12 to start work. He will not only investigate conditions, but he will give his advice and assistance in such matters as shearing, dipping, preparation of wool, shipping, and other matters.

Mr. Burrell's whole policy is for close cooperation with the Dominion Sheep Breeders' Association on a broad scale. Col. McCrae, president of the Dominion Sheep Breeders' Association, has been appointed by Mr. Burrell to go to British Columbia to study the industry there and to inspect and report on districts most suitable for sheep breeding. Dr. Tolmie, live-stock commissioner for British Columbia, will be associated with Col. McCrae in this work. Col. McEwen, president of the Ontario Sheep Breeders' Association, will go to the maritime Provinces on a similar mission.

Statistics of agriculture show that the number of sheep in Canada declined from 3,155,509 in 1871 to 2,792,200 in 1911.

Canada imported in the fiscal year ended March 31, 1912, for breeding purposes, 65 sheep worth \$760 from Great Britain and 23 sheep worth \$1,075 from the United States. Of sheep for consumption the imports were all from the United States, viz, 192,530 head worth \$578,055, while the imports of fresh mutton and lamb were 3,950,462 pounds worth \$299,600, derived nearly in equal proportions from the United States and Australia.

In exports, Canada shipped in the year named only 21,783 sheep worth \$125,443 and 49,312 pounds of mutton worth \$4,201, whereas in 1907 Dominion sheep exports to the United States alone exceeded \$1,000,000 in value.

[Previous reports on the Canadian sheep trade and industry appeared in Daily Consular and Trade Reports for Nov. 1, Apr. 18, and Mar. 16, 1911, Dec. 2, Oct. 31 and 10, 1910, Oct. 20, 1909, and Jan. 6, 1908.]

POWER VEHICLES IN GERMANY.

[From Commercial Agent Archibald J. Wolfe.]

On January 1, 1912, there were counted in Germany 70,006 power vehicles, 63,162 of which served for passenger and 6,844 for freight transportation. The increase, compared with the preceding year, was 12,201 vehicles, or 21.1 per cent. Of the passenger power vehicles, 23,350, or 37 per cent, were pleasure and sport vehicles, 22,942, or 36.3 per cent, served business purposes, and 7,084 were described as professional (in use by doctors, surveyors, etc.). There were also 5,262, or 8.3 per cent, of power-operated cabs and omnibuses, an increase of 1,000 in one year.

During the year ended September 30, 1911, 18,316 power vehicles crossed the German frontier, of which 6,937 were French, 4,138 Austrian, 2,353 Swiss, 1,628 Belgian, 1,200 Dutch, 628 English, and 494 American. The heaviest land-crossing traffic was in August, 1911, when 4,216 foreign automobiles passed the frontiers.

Accident Statistics.

During the period under review 8,431 accidents were officially noted, in which 8,931 automobiles figured. Of the drivers, 92.5 per cent were reported, 1.7 per cent (151) made unsuccessful attempts to flee, and 5.2 per cent (517) actually escaped. In these accidents 4,262 persons were injured and 343 killed. Among the injured, 311 persons were drivers, 702 passengers, and 3,249 pedestrians; among the killed, 24 were drivers, 49 passengers, and 270 pedestrians. The material damage caused by accidents amounted to 1,778,000 marks (\$423,164), of which 82 per cent was damage to the vehicles. Of the 517 drivers who escaped, 252 were finally located. Most of the accidents occurred in the large cities.

The least number of accidents in Germany has occurred proportionately on Sundays (11.8 per cent), and the largest on Saturdays (17 per cent); the second largest number was on Mondays (14.9 per cent). Most of the vehicles figuring in these accidents were from 16 to 40 horsepower. Of the power vehicles involved in accidents, 76.4 per cent were taxicabs and motor busses, 14.6 per cent vehicles of public authorities, and only 12.3 per cent vehicles for sport and pleasure.

CANADIAN GRAVEL-LEASE REGULATIONS.

[From Consul Felix S. S. Johnson, Kingston, Ontario.]

Regulations affecting leases of water-covered deposits of sand and gravel on the shores of Lakes Superior, Huron (including Georgian Bay), Erie, Ontario, and Nipissing and the St. Mary, St. Clair, Detroit, Niagara, and St. Lawrence Rivers have been approved by the Ontario provincial government.

It is provided that the applicant for a lease shall file a plan giving full information as to the deposits to be worked and the methods proposed for working them. For the first year the lessee must pay \$1 an acre rental, and thereafter 25 cents an acre. Each lease must be for 10 years. The Province will receive further revenue from a charge per cubic yard of sand or gravel removed, the rate to be fixed by order-in-council. Sworn returns will be required every 3 months as to the quantity removed.

AUSTRALIAN TRADE NOTES.

[From Consul Wm. C. Magesen, Melbourne.]

Victorian Railways.

A return furnished by the Victorian Railway Commissioners shows that the new rolling stock put into running since July 1, 1911, comprised 56 engines, 77 passenger coaches, and 1,723 freight cars. Of this number, 25 locomotives were built locally at Newport, 20 were imported from the United States, while 11 were of English manufacture, as were also 1,277 freight cars. It is proposed to add another 20 engines to the State's rolling stock, but these are to be built in Victoria.

Cool Stores.

The first step toward the erection of State-owned cool stores at Victoria Dock, Melbourne, has been taken. Tenders were invited in April for constructing the concrete foundations of the buildings. The plans provide for a total storage capacity of 310,000 cubic feet. In addition, grading stores, grading rooms, office accommodation, inclosed platforms and covered ways, and all the usual and necessary offices for carrying on the work connected with such an establishment are provided for.

South Australia's Wheat Crop.

The 1910-11 acreage under wheat, for grain only, in the State of South Australia was 2,104,717 acres, and the total production was 24,344,740 bushels, which is an average yield of 11.57 bushels per acre. The production of grain for each of the last five years has averaged 21,095,664 bushels and, inclusive of the wheat-hay crop, the mean annual value for the five seasons was \$25,024,813. The value of the 1910-11 wheat-grain and wheat-hay crop at average current prices is \$26,244,709.

Vineyard Industry in South Australia.

The viticultural industry in South Australia shows that in the season 1910-11 the total grape production amounted to 36,861 tons, or an average of 1.81 tons per acre. Of this total it is estimated that 21,196 tons were used in making 3,470,058 gallons of wine, 13,134 tons for drying purposes, and 2,531 tons for table consumption and export. There were also produced 15,065 hundredweight (hundredweight=112 pounds) sultanas, 19,680 hundredweight other raisins, and 40,261 hundredweight currants. The area under cultivation was 14,248 acres for wine making, 1,786 acres for table use, 6,918 acres for drying purposes. The estimated valuation of the production of vineyards was \$2,848,289.

Victoria Dairy Statistics.

The Victorian dairy statistics for the season just closed show that 86,000,000 pounds of butter were produced—an increase of 16,000,000 pounds as compared with the previous season; 4,500,000 pounds of cheese and 19,000,000 pounds of bacon were also produced.—*Reuter*.

Duplex telegraph apparatus.—The duplex system recently introduced into Venezuela has given such satisfaction that, according to a report from Consul Herbert R. Wright, of Puerto Cabello, the Government has placed an order for six additional installations—in the telegraph stations at Barquisimeto, Maracaibo, Trujillo, Merida, Rio Chico, and Cumana.

GERMAN COMMERCIAL ATTACHÉS.

[By Commercial Agent Archibald J. Wolfe.]

The German Foreign Office recently sent out an inquiry to the chambers of commerce throughout the country in order to test the actual utility of the German commercial attachés to the business men of Germany. The inquiry also solicits suggestions as to any change in appointment methods and the views of German business men regarding the transfer of the attachés from consulates to embassies.

A number of the chambers have already replied, among them being those of Mainz, Nuremberg, Wurzburg, Dessau, and Constance. In view of the general agreement on most points, the ideas and recommendations of these chambers of commerce are of interest. Members of all the chambers of commerce that have sent in their answers have used, as occasion required, the services of commercial attachés by direct application and are satisfied with the results.

There is a general belief that it is not only best to leave these attachés in consulates instead of sending them on to embassies, where they would be apt to be removed from the business centers, but to increase the number of consulates having such attachés. San Francisco, Buenos Aires, Constantinople, Smyrna, Cairo, Barcelona, Persia, Tokyo, and an additional city in China are advocated for immediate consideration in the increase of the service.

Qualifications and Tenure of Office.

It has been pointed out that commercial attachés are not appointed permanently, but can be dropped at any time, with the result that they occasionally avail themselves of opportunities to go into business for themselves in the sphere of their activities, and it is recommended that they be assured of continued employment while they show themselves efficient. The best among available men hesitate to accept appointments holding out no guaranty of continuity or advancement. It is suggested that the initial appointment be for three years, leading to a definite engagement if satisfactory. Pensioning attachés is not advocated, but a higher rate of remuneration is recommended as an offset. The commercial attachés are also recommended as excellent material from which to choose consuls.

The chambers of commerce disapprove of demanding from applicants for positions of commercial attachés that they be graduates of colleges; that is, possessors of doctor diplomas in national economics. A combination of theoretical and practical education is thought a better prerequisite. A thorough knowledge of the countries of ultimate assignment is urged as an essential condition of appointment.

The commercial attachés come at infrequent intervals to Germany, and conferences are arranged between them and interested persons. It is urged that they return at regular intervals and make a round of the principal chambers of commerce for the purpose of these conferences. They are to be spared, as far as possible, the actual tasks of writing and routine work, and to attend to investigations.

It is also suggested that commercial experts be placed in the principal German export centers for the purpose of permanent personal touch with exporters and a better equipment with aids, such as special books, is likewise recommended.

TRAINING CONSULAR ASPIRANTS IN GERMANY.

[By Commercial Agent Archibald J. Wolfe.]

In the German imperial budget for 1909 a modest provision was made to enable aspirants for consular appointments to pursue special courses of study at the Academy of Commerce, Frankfurt on the Main, and the Colonial Institute in Hamburg, and to do practical work at the various chambers of commerce. The sum asked for was merely 10,000 marks (\$2,380). In 1911 a sum of 20,000 marks was granted for the same purpose, and in 1912 the grant was increased to 30,000 marks.

Only a small number of the aspirants for the consular service could take advantage of the opportunities offered, while the majority were prepared by a two years' course of employment at various tasks in the foreign office. It is now the purpose of the authorities to put an end to the difference in the two methods of training. It is felt that the institutions mentioned, while excellent in their way, are not exactly equipped for training consuls. The questions of export and import, the international problems, and practical consular work are not among the immediate objects of the curriculum.

In October, 1911, a radical departure in the training of consular candidates was adopted. The students pursue their two years' course of employment at practical foreign office work as usual, but there have been introduced special courses of instruction for them. The commercial and industrial conditions of present-day Germany are taught with a special view to consular work. Experts have been secured to instruct in economic relations to foreign countries. Not only specialists in political economy, but practical business men, prominent exporters and importers, cooperate by talks and lectures, and bring the budding consul into touch with practical problems of the import and export trade, informing him of the conditions and needs of Germany's foreign business.

Business and factory managers of prominent enterprises will speak either on self-chosen subjects or on those assigned to them. Consuls on leave of absence in Germany are also assigned to lectures on subjects of consular activities. Inspections of industrial and commercial enterprises will also be undertaken.

The grant of 30,000 marks is expected to cover the additional cost of instruction, especially in view of the fact that much of the tuition will be furnished gratuitously by the lecturers.

BRITISH INVENTION TO COMBAT DUST.

[From Consul Church Howe, Manchester.]

A Manchester engineer has patented an apparatus which, it is claimed, will prevent the clouds of dust raised in dry weather by automobiles and other vehicles.

The device, which is simple and inexpensive, collects the dust as it rises. The dust is drawn into conduits which are funnel-shaped at the mouth and which run from the rear of the front wheels to the rear of the back wheels. These conduits are connected with a box into which the dust is driven by the pressure of air, or this end can also be accomplished by the aid of a centrifugal fan geared to the driving shaft of the automobile. The contents of the dust box can be discharged by pulling a lever at the front of the vehicle.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8991. Grain elevators and storehouses.**—An American consul reports that an elevator is to be built in his district, according to specifications and blue prints, which he has forwarded and which can be obtained from the Bureau of Manufactures. He writes that the contract is probably let by this time, but this is a type of elevator of which the Government is constructing a large number. About 13 will be constructed this year and a like number next year, with others to follow in succeeding years. There will also be constructed many smaller elevators or storehouses in different localities. In addition to these, there are to be much larger structures, resembling the largest in the United States. One of these larger elevators is already being built by an American firm.
- No. 8992. Cortex cascara sagrada and radix hydrastis canadensis.**—A foreign business firm has informed an American consular officer that it wishes to import from the United States cortex cascara sagrada and radix hydrastis canadensis or goldenseal root. The firm which makes this inquiry is the largest drug house in the country and it is likely that it will import the articles mentioned in considerable quantities if put in communication with reliable American manufacturers.
- No. 8993. Water filters.**—A report from an American legation states that owing to the fact that the water throughout a certain country is generally muddy, a large number of filters are used. German and French filters are the only ones on the market at present. Filters are used not only in private houses and business establishments, but also in schools and public buildings. If sample filters (not circulars) could be sent to a certain Government office, together with a statement of the price at which they could be delivered at a certain port, a profitable market might be opened.
- No. 8994. Coal.**—A European municipality is in the market for 8,000 tons of bituminous coal to be delivered before October 1, 1912. An American consular officer has furnished the name of a person from whom specifications, etc., can be obtained.
- No. 8995. Shoes.**—The Bureau of Manufactures is in receipt of a communication from an American firm stating that one of its customers in Mexico wishes to be put in touch with American manufacturers of fine shoes. Communications should be sent direct to the Mexican firm.
- No. 8996. Agencies for American firms.**—An American consular officer has forwarded a copy of a letter from a business man who states that he wishes to enter into direct commercial relations with firms in the United States trading in all sorts of fancy goods, novelties, photographic accessories, musical instruments, knives, razors, office supplies, etc. He desires firms dealing in these articles to send direct to him their price lists, catalogues (which may be in the English language), conditions of sale, and samples. No references are furnished.
- No. 8997. Railway carriages.**—A report from an American consular officer states that from trustworthy sources he has learned that certain Government railways will soon order a large supply of new carriages. The order will be partly supplied by home manufacturers and the rest from abroad. No tenders have yet been published. He states that if American builders of railway carriages will furnish him with catalogues, they will be placed on file and brought to the attention of interested persons. Such catalogues might also be sent to two firms named in the report.
- No. 8998. Iron mines.**—A foreign Government official has called the attention of an American consular officer to a large deposit of iron ore recently discovered and has intimated his desire that foreign capital be interested in its exploitation. Should American interests desire to make an investigation of these deposits a representative should be sent to take the matter up with the proper authorities. Copy of the complete report, giving further details, will be sent to interested persons by the Bureau of Manufactures.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

No. 632. Navy Department supplies.—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until June 21 for eight steel coal barges, schedule 4621. Tenders are invited until June 25 for the following supplies: Schedule 4620, deck scrubbing brushes, paint brushes; schedule 4618, combination desk and bracket fans; schedule 4622, complete controlling mechanism; schedule 4635, nickel, electrical recording pyrometer, alcohol storage tanks; schedule 4623, pine-tar oil; schedule 4619, scoop shovels; schedule 4637, mild bar steel. Bids will be received until July 2 for the following: Schedule 4625, flinders iron bars, compensating binnacles; schedule 4631, silver boatswains' calls, steel wire plow rope, ratchet braces, brass pole brackets, twist drills, mounted grindstone, hardware, tools, machinists' handled hammers, brass cabin-door hooks, steel tape measures, carpenters' rules, machine brass screws, machinists' sets, bench vices; schedule 4628, charcoal, window glass, yellow pine; schedule 4632, double insulating flexible conductors; schedule 4624, molded rubber gaskets, hydrants; schedule 4629, lead pipe, rod rivet bronze, wrought bar iron, chain bar iron, medium bar steel, round-rolled cold steel, medium steel; schedule 4634, sand, toilet soap, broken or gravel stone, Virginia or North Carolina pine piles; schedule 4633, sugar; schedule 4626, white-oak railroad ties, flexible copper tubing, North Carolina pine culls, ingot aluminum; schedule 4630, medium angle steel, medium black plate steel; schedule 4627, muriatic acid, beeswax, gray sal ammoniac, coal tar, ferric-oxide varnish, whiting. Tenders are invited until July 30 for 100,000 pairs shoes, high, indestructible sole, schedule 4636. Firms interested in any of these items should make application to the Bureau of Supplies and Accounts, giving the schedule numbers desired.

No. 633. Furniture, floor coverings, fuel, and ice.—The General Supply Committee, Treasury Department, Washington, D. C., announces that the date of opening sealed proposals for furnishing articles covering classes 9 (furniture and floor coverings) and 14 (fuel and ice), for executive and independent establishments, has been postponed from June 4 to June 17, 1912.

No. 634. Machinery of various kinds.—Sealed proposals will be received at the office of the United States Reclamation Service, Elephant Butte, N. Mex., until June 20, 1912, for furnishing ball mills, tube mills, a rock crusher, a rotary dryer, and a mixing and weighing machine, for a sand-cement plant on the Rio Grande project, New Mexico-Texas. For particulars address the United States Reclamation Service, Elephant Butte, N. Mex., or Washington, D. C.

No. 635. Subsistence stores.—Sealed proposals will be received at the Marine Hospital, Baltimore, Md., until June 14, 1912, for furnishing subsistence stores, etc., including gas, water, telephone service, fuel, etc., required at the hospital during the fiscal year ending June 30, 1913. Specifications can be obtained from the medical officer in command at the hospital.

No. 636. Distilling plant.—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until June 22, 1912, for furnishing and superintending the installation of a 25,000-gallon quadruple-effect sea-water distilling plant, with all its appurtenances, in connection with the central power plant at the naval station, Guantanamo, Cuba. Plan and specifications can be obtained on application to the bureau.

No. 637. Supplies for lighthouse.—Sealed proposals will be received at the office of the Lighthouse Inspector, Tompkinsville, N. Y., until July 2, 1912, for furnishing the following supplies for the fiscal year ending June 30, 1913: Brushes, chimneys, dry goods, engineer stores, packings, flags, hardware, fire hose, rubber fire and steam hose, nozzles, tool steel, cold-rolled steel, lumber, lamps, mixed paints, paints and oils, varnishes, ship chandlery, tin cans, brooms, wicks, blocks, brass rod, sheet brass, brass tubing, copper sheets, wire, tubing, brass castings, sheet metal, iron castings, ammonia, denatured alcohol, glycerin, sal soda, asbestos cement, Bon Ami, Sapolio, soap, barometers, clocks, boat compasses, time markers, buff skins, machine wipers, candles, lubricating oils, charcoal, American Portland cement, coal bags, cotton waste, mats, corks, packing tow, iron, steel billets, sheet steel, linseed oil, turpentine, mattresses and pillows, matches, rubber sheet packing, crash, red and white lead, zinc, shellac, yellow metal, etc.

THE CONSUL AND THE TRADE OPPORTUNITY.

[From Consul James Oliver Laing, Malta.]

It would be a good plan for American merchants to notify consuls of successful trade opportunities. This would have the effect of keeping the consul in touch with the local merchants who are introducing lines of American goods. It also happens very often that a merchant who introduces one line of American goods follows it with another. These are the men the American consul ought to know, and this is especially true of a district where the merchants have the habit of using the consulate catalogue and sample room, as they do here.

Notifying consuls of successful trade opportunities would also reversely give them a knowledge of the failure of trade opportunities in certain lines and would lead to an investigation that might clear away the difficulty. It took me 9 or 10 months to find out that, although several trade opportunities in a certain line had been published in Daily Consular and Trade Reports and many letters had been written to the consulate by American merchants, no sales were being made. Inquiry at the store of a friend revealed the fact that credit terms for Malta were being based upon credit terms offered in the United States and the time extended was too short.

A little advice to the local merchant, who knew nothing of American business methods, brought about further correspondence between him and the manufacturer, with the result that two large orders for the American product were given. The goods were a success, and a rival merchant was forced to order a stock of similar wares in the United States. If it had been evident that no business was resulting from the trade opportunities because of the fact that I was getting no notices of success, I would have known months earlier that something was wrong.

The knowledge that trade opportunities are successful would also act as a stimulus to the consul toward still greater effort. The notices from American merchants would of course be confidential and be part of the archives of the consulate. The consul does not necessarily have to follow up information received in these notices by action suggesting the commercial traveler. There are many ways of avoiding that.

LOADING MARKS ON SEAGOING VESSELS.

[From Consul John F. Jewell, Vladivostok, Siberia.]

The following is a translation of a letter received from the office of the chief of the Vladivostok trading port, regarding the loading marks on seagoing vessels:

According to the requirements of the law of October 31, 1909, relating to commercial navigation, and "Rules regarding the examination of seagoing commercial vessels" confirmed by the Minister of Trade and Industry November 23, 1911, it will be required from all seagoing commercial vessels (with the exception of purely traders), together with other stipulations of the said regulations, that the loading marks of the deepest draft of the vessel are to be placed on both sides of the vessel. The correctness of the loading marks so placed must be confirmed by a certificate issued by the proper authorities, which is to be kept on board.



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HOW TO INCREASE AMERICAN TRADE WITH TRINIDAD.

[From Consul Franklin D. Hale, Port of Spain.]

Notwithstanding American trade with Trinidad, with its population of 335,000, is growing in importance (amounting in the year 1911 to more than \$9,700,000, or nearly 30 per cent of the island's total trade), still, because of the advantages of location and transportation facilities with the principal American ports, it would seem that it might easily be materially increased if American manufacturers and exporters would energetically use the means at their command toward that end.

This existing trade has been in process of building for many years; and while it is probable that some credit can justly be given to the catalogue and advertising system, a larger degree of credit is probably due to the work of active, faithful, and discreet traveling agents who have, with more or less regularity, although usually at very infrequent periods, visited Trinidad as one of the places in their South American itinerary.

This course may have brought about the beginning of trade in many lines and continued it if conditions resulting therefrom proved satisfactory; but there have undoubtedly been not a few instances where there was some dissatisfaction, and the trade was lost because of the inability of the salesman to repeat his visit in a comparatively short time when the differences could have been explained; or where correspondence by mail very naturally failed to bring the purchaser and seller together to the extent of continuing the friendly trade relationship. In the meantime some competitor happened along and took advantage of the opportunity and the trade which might have been continued to the American exporter went to some other country.

Cooperation Among Noncompeting Lines.

I have more than once advised that manufacturers or exporters in noncompeting lines could unite in the employment of an able traveling representative, and thus satisfactorily cover the field, when,

for the several individual lines separately, the expense might not be warranted by the possible trade to be gained.

To make this market more valuable to the American manufacturer, I earnestly suggest for careful consideration the system of establishing permanent agencies, believing that this field is large enough to warrant such action. Such a system might not offer equal opportunities to all classes of goods, but that it would be successful in many lines of trade if properly organized and managed I have little doubt. Repeating the suggestion just made as to commercial travelers, several houses not feeling able to test the experiment alone might unite in establishing an agency for noncompeting goods, placing it under the management of the right kind of an American with locally employed assistants.

In this way the local trade of Trinidad would not be lost through neglect or the lack of frequent intercourse between seller and purchaser; and further, if the development of the business should warrant it, subagencies could be established in other West Indian islands and possibly in the adjacent territory of South America.

The Orinoco region of Venezuela, with its undeveloped wealth and possibilities, as well as the nearer districts of eastern Venezuela, reach the outside commercial world to a great extent through Trinidad, the transshipment trade being very large. With its present transportation facilities to and from New York, Boston, and Gulf ports Trinidad could well be made a distributing center, because of the weekly sailings from this port of the boats of the Royal Mail Steam Packet Co. to the other West Indian islands and the regular weekly communication with Ciudad Bolivar on the Orinoco.

Advantages of Personal Representation.

I believe a well-organized system along these lines would in many cases work out satisfactory results in a reasonable space of time. It is an established commercial principle that an active man on the spot can, by personal influence and presentation of goods, create a demand that was not previously realized and which catalogues and long-distance correspondence would not bring to life. And often, after the demand is created, it requires to be kept alive by active nourishment administered more frequently than once a year, or possibly a longer time, as has occasionally come to my notice while talking with American commercial salesmen calling here on their South American itinerary.

I am well aware that many American manufacturers are now, and have been for years, represented here in the sale of their goods by old established houses and through them enjoy a profitable trade. These are generally large houses doing a general importing and exporting business, and they are not confined to their American connections but often hold agencies in the same line of goods from other countries, or simply carry in stock similar goods from various manufacturers in different countries, possibly, and sell what is called for without pressing to the front any special brand or make. They are not so situated, therefore, as to actively push any special line beyond, possibly, a special short-time advertisement in the local papers. They do not in any sense "drum" the trade as it is understood in the United States. They are all highly honorable and responsible houses, but they have a diversity of interests, and any special line

of trade, because the chief purpose and effort do not center in it, is liable to suffer.

Some Concrete Examples.

To illustrate somewhat the principle involved herein I cite some concrete instances which have come to my attention during the past year.

A little over two years ago a genuinely alive American representing an oil company visited Trinidad and established a branch for the firm's business. Previous to that time these goods had been handled here by a most reputable house in connection with many other lines of merchandise, but the stock carried was small and no special efforts were made to increase the trade. Some of the large dealers imported direct. The new representative at once procured a suitable location for an office and warehouse for a small supply, with opportunity for enlarging when the need should be felt. He employed necessary local assistants and applied himself to studying the needs of the trade and the business customs and peculiarities of the business men with whom he hoped to do a profitable business. It can not be said that he entered a field where, from the first, he had to contend with energetic competitors, although there were obstacles to meet and overcome.

The results of establishing this branch here are very marked. Not only has the business nearly doubled in less than two years, but it has been broadened to include not only all kinds of oils manufactured by the company, but also gasoline, naphtha, lamps, lanterns, candles, oil stoves, etc. In some of these lines the goods were practically new to this district, but, being on exhibition and actively and personally advertised, a good demand is being created and sales are multiplying. Especially is this true of oil stoves. They were hardly known here until this trade-expansion movement by the company. I am informed that the company is considering making this a distributing center to subagencies in the other West Indian islands and near-by districts in northeastern South America.

Success of a Sewing-Machine Campaign.

Another instance of the success of a locally established agency and warehouse is that of a sewing machine company. Previous to 16 months ago, sewing machines of half a dozen of the best known makes were carried in stock by several of the leading stores in Port of Spain, but they were nearly all cheap hand-power machines selling for \$5, \$6.50, \$7, and \$9. It is estimated that at that time about 900 of the machines under discussion found an annual market here; 95 per cent of these were the cheap machines.

In January, 1911, the company sent to Port of Spain an American who had been with it for many years and who knew the business in all its details. A most favorable location was secured for office and wareroom; necessary help was employed, and proper advertising displayed to attract the public. As soon as needed, men were educated to drum the city trade, and later the country districts were visited, and this custom is being continued with energy.

The machines are sold mostly on the weekly installment plan of payments, and I am informed that comparatively few have to be taken back for nonpayment. The increase in the business has been very satisfactory. In 1911 over 1,200 machines were sold, all cabinet

styles, the prices ranging from \$21 to \$67, and averaging a little less than \$30. It was the purpose to sell in this market a higher grade of machine without decreasing the number sold, and the object has been fully achieved by this local agency.

It is now the further purpose of the company to extend the business from this center to other West Indian islands and the adjacent districts in Venezuela and Demerara.

Others Could Do as Well.

These are marked instances of what has been done in Trinidad by establishing agencies for the display of goods and earnestly working for the trade. Possibly there are reasons specially favorable to these companies for embarking in such an enterprise, but I am reasonably sure that other American manufacturers could with profit investigate this market with a similar plan in view. And for those who do not dare venture along these lines I am confident that greater profits could be enjoyed on an enlarged business if commercial travelers of tact, character, and business skill were given a field in this section which could be covered every three months, and seller and purchaser thus be brought together more frequently than has been the custom in the past. Undoubtedly trade which might be enjoyed by American exporters is now lost to them because this market is not more thoroughly studied and understood and the trade more frequently visited by competent men. Many of the larger mercantile houses doing business with America make their purchases through New York commission houses, but I feel assured that commercial travelers personally representing goods here would effect much larger sales in numerous lines.

CONSULAR TRADE CONFERENCES.

Consul Robert J. Thompson, of Hanover, Germany, announces that he expects to arrive at New York on June 14, 1912, on leave of absence for 50 days. His address while there will be the Waldorf Hotel. His permanent address while in this country will be Masonic Temple, Chicago, Ill.

Consul James Verner Long, of Venice, Italy, expected to arrive in New York about June 10, 1912, on leave of absence for 60 days. His address for five days in New York will be at the Imperial Hotel. His permanent address while on leave will be 5530 Howe Street, Pittsburgh, Pa., where business men or organizations interested in commercial and industrial conditions in his district may address him.

Consul Franklin D. Hale, of Port of Spain, Trinidad, British West Indies, advises that he expects to arrive in New York on July 17 on leave of absence for 30 days. He will be in New York City for two days, and may be addressed by business men at the Grand Union Hotel. The next two days he expects to spend in Washington, after which he will proceed to Vermont for the remainder of his leave, where his address will be Lunenburg.

Maltese public conveyances.—Consul James Oliver Laing has forwarded a photograph of the type of public conveyances in use in Malta. The price of such a vehicle, which is called a "carrozzin" in Maltese, is about \$175. Private carriages, the consul states, are generally in the Paris and London style. The photograph referred to will be loaned, upon application, by the Bureau of Manufactures.

CONSTRUCTION WORK ABROAD.**MEXICO.**

[From Consul Phillip E. Holland, Saltillo.]

Building Construction on Mexican Plateau.

The walls of Mexican buildings of the great central high region are chiefly of adobe covered with plaster and are too soft to retain permanently driven nails. This condition is avoided in the case of wainscoting, door facings, baseboards, etc., by inserting wooden studding with the outside surface left flush with the wall, to which the other woodwork is nailed.

The ordinary construction in this district is the adobe. This is a sun-dried brick of various dimensions; the largest size being 14 inches wide and 3 inches thick. Formerly they were made 4 inches thick. The earth from which they are made is strongly impregnated with lime. It is pulverized with a heavy hoe and water added. When brought to a proper consistency straw is added. This mass is then molded in a wooden frame and when sun dried is ready for use.

The cost of making adobe ranges from \$3.75 to \$6.25 (gold) per thousand. Masons charge \$5 to \$10 (gold) per thousand for laying them in the wall. When properly made and laid they last indefinitely. There are adobe houses in Saltillo that have been in use for over 150 years.

In adobe houses the wall finish is a cheap plaster made of fine sand and locally burned lime. It is then given a finish of whitewash; usually coloring of various tints is added, the popular taste running to a display of lines and figures.

Wall Finish—A Concrete House.

The ceiling is usually made of cloth. This comes in bolts containing 25 meters (27½ yards) in length and about 60 centimeters (23½ inches) wide, the cost per bolt ranging from \$1.35 to \$1.75 (gold), depending upon the thickness of the texture. The cloth is finished in the same design as the walls.

In the more expensive adobe houses oil is used in place of lime, and in many instances the painting is quite elaborate, going into intricate figures and landscapes. A few walls are finished in American wall paper. On a very few alabastine has been used.

There are a number of stone and brick buildings in this city, some of them of recent construction and built on modern lines. These have walls artistically decorated as described, the cost depending on the materials used and the elaborateness of the designs. Most of the interior wall construction is solid, and very little lathing is used. It is my impression that laths are not offered in the lumberyards here.

There are no entirely wooden constructed houses in Saltillo. There are a few ironclad with wooden finish inside. There is one concrete house in this city; it is quite pretentious, and is nearing completion.

Cost of Materials—Duties on Wood.

Native lime is delivered at the place of construction at \$4 to \$6 (gold) per ton. Sand is delivered at \$1 to \$1.50 (gold) per ton. Carpenters, painters, and masons earn 50 cents to \$1.25 (gold) a day, and their helpers 31 to 37 cents a day. Eleven hours constitute a day's work. This appears to be very low wages; when, however, the labor

conditions are taken into consideration they about equalize the cost and result with labor in the United States.

Generally the construction is of solid materials from interior to exterior without any studding or partitions between the walls. A few modern structures have studding in their partitions.

Common building wood is exempt from duty under article No. 146 of the Mexican tariff. Explanatory note No. 69 excepts wood sawn into thin sheets and wood cut, perforated, or wrought in any way so as to fit it for some definite object. Wood that has been planed, grooved, or dovetailed is also excepted. Common wood when planed and wrought into dovetailed boards carries a duty of 5 cents (gold) per 100 kilos (220.46 pounds). If it is sawn into thin sheets it is dutiable at the rate of 55 cents (gold) per 100 kilos.

[From Deputy Consul General John C. Allen, Monterey.]

Use of Sillar Bricks Finishing Materials.

In the construction of large buildings in Monterey structural steel and concrete has of late been used to some extent. Brick is used considerably for city buildings and private residences.

The building material most used is the "sillar," which is found only in certain parts of Mexico. Sillar consists of blocks of hard compact clay about 3 or 4 feet square. These blocks are cut out of the solid clay ground in the same manner as ice is cut from ponds, lakes, and rivers in the cold north, and are used for building purposes without further preparation. The sillar should not be confused with the adobe, which is used very little here, as sillar is cheaper. In some parts of the country there is another building material called "tepetate," which is similar to the sillar. Mexico has many mines of beautiful building rock of different colors, which is used to some extent for large and costly buildings, theaters, statehouses, etc.

Sillar is used for side, end, and interior walls. The exterior walls are plastered and whitewashed any color to suit the taste. Interior walls are plastered and whitewashed or painted. The painting is generally an imitation of wall paper. Wall paper is sometimes used instead of whitewash or paint, but very rarely. No studding is used in the walls; it would involve considerable extra expense, as lumber is very high in price. The sillar will not hold nails. There is absolutely no woodwork in the walls except for the doors and windows. Floors are made of cement or tile.

The roofs of buildings in Mexico, with few exceptions, are flat. Strong wood rafters are placed with ends resting in the walls about 2 feet below the top of the wall. A tight board floor is laid over the rafters. This floor is covered over with 6 to 10 inches of clay or cement, or both. Holes, water drains, are made through the walls at the top level of the roof. The roof of a building resembles a great open box without cover. The walls of the average dwelling are about 18 feet high, which makes 15 feet from floor to ceiling, inside, 1 foot for ceiling, rafters, and roofing, and 2 feet projecting above the top of the roof.

The ceiling most used is strong canvas cloth nailed to the rafters. The canvas is sometimes whitewashed; others paint it with water or oil colors, while some have their ceilings decorated with all kinds of fancy designs and landscapes at a cost of hundreds or thousands of dollars. Many prefer no ceiling at all, painting the rafters instead.

CANADA.

Plans for Hudson Bay Terminals.

Several corps of Canadian engineers and surveyors are going to Port Nelson and Port Churchill, and work will continue all next winter on Hudson Bay terminals for the new railroad. In the meantime a decision will be reached by the Dominion Government as to which of these ports will be selected. A dispatch from Ottawa states:

Supplementary estimates provide \$2,000,000 for starting the terminals, building docks, elevators, etc., so that the Government has provided sufficient money to be able to rush forward the work. It is the ambition of the Cabinet to have the Hudson Bay line ready to help move the crop of 1913. But a road is of no value unless the terminals are also completed, and for this reason this work is also being rushed. By the time the line reaches the bay it is hoped to have everything in readiness for a steamship line running to Great Britain.

THE NETHERLANDS.

[From Consul General S. Listoe, Rotterdam.]

Manner of House Construction—American Finishing Materials.

Holland in general lies about 3 feet below the level of the sea, the whole country being protected from the sea by dikes; in consequence of which the climate is very damp and moist, while the soil is quite light, though rich, and, owing to so much moisture, rather soft. As a result of these climatic conditions, it has been found necessary, in constructing buildings, to drive many wooden piles (about 50 feet in length and 1 foot in diameter) into the ground, upon which a plank foundation is laid. This is done to prevent the walls from settling and cracking, but, even in spite of the fact that oftentimes thousands of these large piles are used in one building, few, even of the modern structures, are finished with plastered interior walls such as are so common in the United States.

The walls of the Dutch buildings are universally of brick throughout (solid material from the interior to the exterior without any studding or partitions between the walls); as a substitute for the American stud-dings (2 by 4's)—built against the brick walls—and upon which the laths are nailed—a wooden frame is here constructed, also against the brick walls, over which a coarse cloth is stretched, and upon this cloth the wallpaper is then hung. This makes a very satisfactory, cheap, and well-appearing wall and seems to answer the purpose in every way. The cost of these walls depends, of course, upon the quality of cloth and paper used, but they can be constructed at a much less expense than American plastered walls.

The ceilings are constructed somewhat different than the walls and proportionately at a greater expense. In place of laths, as used in the United States, dry reeds are fastened to the beams, upon which a thick layer of plaster is spread; this is then either painted artistically or decorated with flower or other designs and finished with a coat of "whitewash," presenting in general a very attractive appearance. It is rather uncommon to paper the ceilings in Holland, which are universally finished in a "whitewashed" condition.

I see no particular reason why American wall-finishing devices could not be successfully introduced into the Netherlands, but, as a prominent Rotterdam dealer in building materials states, it might take some time to produce the desired result. It is rather difficult

to change old established European customs; this must be accomplished gradually. If a few of the most prominent architects and dealers in building materials here were interested they would be able to give aid in the introduction of American building materials into Holland. To this end a list of important Dutch architects and dealers in building materials is forwarded [and may be had from the Bureau of Manufactures at Washington].

SWEDEN.

[From Consul General E. L. Harris, Stockholm.]

Many New Municipal Buildings.

Notwithstanding the depression existing in the building trade in Stockholm during the past year, and which exerted an influence upon private enterprise to such an extent that little has been done, the municipality has constructed a number of fine, large public buildings. Many have also been projected for the near future. The new police headquarters building completed last year cost \$900,000. A new municipal house is also being constructed, at a cost of \$950,000. A new town hall is being planned which will cost \$2,000,000.

The Stadium, in which the Olympian Games will be held this summer, has just been completed, at a cost of \$266,000. It has seating accommodations for about 25,000 spectators.

A new market hall has also been erected, at an expense of \$200,000. The Engelbrekt Church, commenced in 1910 and which will be completed in 1913, is expected to be the finest church in Stockholm as regards architecture. It will cost \$350,000.

Last year a new street in Stockholm was completed which cut through the heart of the city. A good portion of it was blasted out of a ridge, at an expense of \$1,800,000.

A proposal is now being entertained to build an underground railway from the Stadium to the central railway station and from thence to the west end of the city. The cost is estimated at \$3,800,000.

Other New Structures and Harbor Works.

While private enterprise was slack during 1911 some large corporations made various improvements. The Grand Hotel, considered one of the finest in Europe, completed a new addition early in 1911. The large and commodious Strand Hotel has just been completed. Two large banking establishments have started building large and handsome structures. It is also proposed to build a new house for the Nobel Institute.

During 1911 the harbor of Stockholm has been extended and improved, while a number of large modern warehouses have been erected along the different quays.

BRITISH INDIA.

[From Consul Edwin S. Cunningham, Bombay.]

Railways in the State of Bhavnagar.

The 36-mile Dhasa-Kundla Railway, built at a cost of \$422,000, was formally opened on May 16, 1912, by the Governor of Bombay. It is located in Bhavnagar (a Native State of 2,800 square miles and 400,000 population on the west coast of India), and its opening is another evidence of the progressive policy of developing its com-

mercial and industrial resources. In the address of the Maharaja of Bhavnagar at the opening he stated:

Two new projects have been recently commenced, with the sanction of the Government, the Botad-Jasdan connection of 34 miles, and the Kundla Mahuva link, 36 miles. When these three schemes are completed, I shall have added 122 miles to the State's railway system, at a cost of \$1,394,920, which, with the outlay on the main line, will bring the total railway investment of the State to \$4,161,120 for an aggregate of 242 miles of line. But these works do not exhaust the possibilities before us. I have in view a scheme for constructing a steam tramway to connect all the important district towns of my State which are not served by the existing system, and this will mean the laying down of another 90 miles of line.

This indicates some of the proposed plans in this Native State. It is impossible to ascertain exactly the present status of the schemes outlined, but sufficient is revealed to indicate the possibility of trade in articles necessary for the fulfillment of these projects.

Opening of Waterworks.

On the same day the Victoria Jubilee Waterworks were inaugurated in the final stages. For the city of Bhavnagar the additions and improvements—

Comprise the widening and regrading of the supply channel, so as to increase its capacity fourfold; the provision of automatic gates at the storage lake, which will give an additional 3 feet of head and raise its capacity by 50,000,000 gallons; the construction of five filter beds with an aggregate of 3,000 square yards; the erection of two covered pure-water tanks estimated to hold a full day's supply for the town; the installation of pumping plant in duplicate with a high-level service tank; and the laying of 10½ miles of distributing mains. These have cost \$150,000, which, added to the outlay on the earlier works, have raised the total expenditure on the water supply of the town to \$422,000.

CEYLON.

[From Consul Charles K. Moser, Colombo.]

Completion of the Colombo Breakwater.

The final stone in the completion of the southwest breakwater of Colombo Harbor was laid on May 1 by Sir Henry McCallum, governor of Ceylon. With the addition of this protecting arm the artificial construction of Colombo Harbor is at last completed, at a cost of approximately \$15,000,000. The work was begun in 1875, when the late King Edward VII, then Prince of Wales, laid the first block of the southwest breakwater. The work was projected by Sir Hercules Robinson, then governor of the colony, designed by Sir John Coode, and executed by John Kyle, who completed the southwest breakwater in 1885. Subsequently a breakwater to the northeast, sheltering the harbor from the northeast monsoon, was completed in 1906. The new arm attached to the southwest breakwater is the final protection of the two against the violence of the southwest monsoon.

Before the erection of these breakwaters Colombo Harbor was a mere open roadstead exposed to all the violence of the sea. It is now one of the most commodious and best-protected artificial harbors in the world, being a square mile in area and capable of accommodating 40 to 50 vessels of over 12,000 tons.

It is planned next to dredge a large portion of the harbor to a depth of 36 feet, in order that it may accommodate the largest vessels in the world.

The tonnage figures of Colombo for the first four months of 1912 were 3,437,073, against 3,165,557 tons in the same period last year

and 2,878,835 tons in the 1909 period. The nationality of foreign vessels calling at Colombo January 1 to May 1, 1912, was: German, 91; French, 49; Austrian, 62; Russian, 35; Dutch, 48; Japanese, 32; Spanish, 13; Italian, 8; Norwegian, 14; American, 1. The Hamburg-American liner *Cleveland* arrived with 500 tourists from San Francisco on April 17 and sailed on the 19th for Bombay.

FASTER RAILWAY SERVICE IN CHOSEN (KOREA).

[From Vice Consul General Edwin L. Neville, Seoul.]

The Director of the Railway Bureau of Chosen (Korea) in a press interview says that after the revision of the existing time-tables this month of June the time between Tokyo and Seoul will be shortened by four hours, and after the inauguration of the through express service between Fusan and Changchun, in the near future, the bulk of the trans-Siberian travel will join the Russian railway at Changchun, instead of Vladivostok, as at present.

The director lays particular stress upon the present outlays for railway building and improvement of rolling stock. He states that the amount appropriated for this work amounts this year to \$4,482,000. It is anticipated that a large section of the Seoul-Wonsan line will be completed during the current year.

New passenger cars of the latest style, new engines of greater speed, and other railroad equipment are being ordered. In this connection manufacturers of American railway materials have representatives here.

COMPETITION FOR MOTORS FOR AEROPLANES.

[From Consul General James A. Smith, Genoa, Italy.]

A report from this office in Daily Consular and Trade Reports for May 4, 1912, called attention to the formation of a National Aero League in Italy and the donation of a fleet of 100 aeroplanes to the Italian Government. Another report in the issue for April 23 called attention to a military aeroplane competition organized by the Italian Ministry of War. The ministry has now made arrangements for a second competition to be held for motors for aeroplanes. The competition is for motors for military aviation. The first prize will be \$15,000, the second \$5,000. Applications will be received until October 1, 1912, while competing motors must be presented by January 10, 1913. [The details as to the competition may be had from the Bureau of Manufactures, Washington, D. C., while additional information may be secured from the Ministero della Guerra, Rome, Italy.]

Agricultural Leaders in Southwestern Spain.

Consul Charles S. Winans writes that the only agricultural society at Seville is the Camara Agricola de Sevilla, Secretario D. Antonio Lopez Plata. The agricultural schools of the district are (1) Granja Provincial de Alfonso XIII, Director Don Carlos Morales Antequera, at Seville; (2) Granja Agricola Regional Director Don Eduardo Noriega, at Jerez de la Frontera. Other Government agricultural bureau chiefs in this section are Don Jose Maria Grande de Vargas, Seville; Don Ciriaco Iriarte, Cadiz; Don Alberto Castineyra, Cordoba; Don Andres Buisan, Huelva, Spain.

FLAX CROP IN CANADA.

[From Consul General John G. Foster, Ottawa; supplementing article in Daily Consular and Trade Reports for Nov. 21, 1911.]

It has been ascertained that the yield of flaxseed in the northwest Provinces was 5,054,000 bushels less than the estimate reported at the end of December. This was in a large degree due to the unusually rainy autumn, which prevented the curing and housing of much grain. Large quantities of flax were destroyed while standing, and much that was cut could not be got into condition for thrashing. The revised yield and value of flaxseed in 1911 is therefore now given by the Census and Statistics Office as follows:

Province.	Acreage harvested.	Yield in bushels.	Value.
Quebec.....	1,719	19,000	\$32,000
Ontario.....	8,367	118,000	223,000
Manitoba.....	62,231	899,000	1,582,000
Saskatchewan.....	570,030	6,413,000	9,639,000
Alberta.....	40,275	418,000	502,000
Total.....	682,622	7,867,000	11,855,000

Unrevised official statistics place the Dominion's exports of Canadian flaxseed during the 12 months ended March, 1912, at 1,504,528 bushels, valued at \$2,842,242. These shipments were distributed: Great Britain, 495,496 bushels, value \$1,004,888; United States, 991,802 bushels, value \$1,802,894; Belgium, 16,290 bushels, value \$32,580; other countries, 940 bushels, value \$1,880. There were also exported during the same period 6,958 hundredweight of flax, worth \$72,191, of which 6,510 hundredweight, value \$70,266, went to the United States.

BRITISH INDIA NOTES.

[From Consul Stuart K. Lupton, Karachi.]

Freight cars.—The Northwestern Railway has been authorized to purchase in Great Britain 1,000 covered goods cars.

Railway gauge.—The Government is taking steps to "resume" from the Karachi Port Trust 52 acres of land required for the termination of the meter-gauge railway. This is taken to imply that the meter-gauge connection between Karachi and Hyderabad, by which the whole of the Rajputana-Malwa railway system will get a maritime outlet, is becoming a possibility.

Motor car and motor cycle imports into India during the years 1909-10, 1910-11, and 1911-12 are reported as \$1,540,900, \$2,376,230, and \$3,252,110, respectively. Of the imports for 1911-12, \$2,514,100 worth are credited to Great Britain, but a large number of the cars represented thereby were in reality of foreign manufacture. Three Ford cars (American) were put into use in this city in April.

The great Sind irrigation project is again under consideration by the Government of India. The present proposal is to construct a barrage at Sukkur and increase the capacity of the Rohri left-bank canal. The proposed outlay is about \$22,000,000. At least three alternative propositions have been proposed during the last three years, with costs as high as \$73,000,000. Lack of money has been largely instrumental for their failure to pass.

BANKING IN THE UNITED KINGDOM.

[From Consul General John L. Griffiths, London.]

In a recent issue of the Statist, English banking conditions are comprehensively reviewed and a short history of many of the principal banks of the United Kingdom is given. The following facts are gathered from the general survey of banking conditions in the article:

The annual income of the United Kingdom is now in the neighborhood of \$10,949,625,000, of which the annual addition to the nation's wealth or capital fund is about \$1,703,275,000. The whole of this income passes through the hands of bankers in the course of the year, and the amount of bankers' funds at the close of the year is merely the balance after all the year's expenditures have been met and all the permanent additions to wealth have been effected.

Experience shows that bankers' balances, the floating capital of the nation, increase in proportion to the growth in savings and in wealth; but it should be clearly understood that the increase in bank deposits and in bankers' funds is only a small portion of the supplies of new capital annually available for the increase of production. In comparing the growth of deposits and of banking funds in this country with the growth in other lands it is especially necessary to recollect this fact. Here the greater part of the permanent capital provided for our industries and for the expansion of our trade is found by the issue of permanent securities, and only a small part is supplied from banking funds. In other countries depositors, instead of purchasing permanent securities, leave their savings with bankers for much longer periods, and a larger portion of the capital needed for the extension of industry and of trade has therefore to be supplied from bankers' funds. It will be evident that the British is the sounder practice. Savings are used to create fixed wealth, and cash balances are employed to finance consumable wealth.

Growth of Deposits.

Last year the amount of capital subscribed for publicly issued securities in the United Kingdom was nearly \$973,300,000; and in the last six years the amount of new capital publicly subscribed in this country exceeded \$4,866,500,000. Over and above the subscriptions to new securities the deposits of bankers last year increased \$170,327,500, and since 1905 the expansion has been \$681,310,000. At no time have banking funds expanded more rapidly than at the present time. In 1911 the increase in deposits was equal to nearly 4 per cent, and in the past six years the expansion has been 16 per cent. If it be recollected that the normal expansion in trade, income, and wealth of this country is about 2 per cent per annum, it will be realized that an expansion of nearly 4 per cent last year in bankers' deposits affords additional testimony to the present activity and prosperity of trade and of business.

The increase in the deposits of British banks since 1895 will be evident from the following statement:

Year.	Number of banks.	Deposits.
1895.....	155	\$3,576,877,500
1900.....	111	4,014,862,500
1905.....	88	4,238,721,500
1910.....	69	4,749,704,000
1911.....	67	4,915,165,000

The notable fact is that notwithstanding the very large increase in deposits the number of banks in 1911 was less than half of the number in 1895. This means that many amalgamations have taken place, the smaller banks being absorbed by the larger institutions. As the practice in the United Kingdom is for the principal banks to have many branches it does not signify that the reduction in number means any curtailment of banking facilities; and that indeed is not the case, because the number of banking offices is constantly increasing. To-day there are nearly 8,300 such offices, or double the number a quarter of a century ago, and more than four times as many as 50 years ago.

Assets and Liabilities.

At the close of 1911 one bank had deposits of \$408,786,000, and 631 branches; another bank had nearly \$403,919,500 deposits, with 344 branches; a third had deposits approximating \$379,587,000, with 716 branches; while a fourth had 371 offices and \$306,589,500 of deposits. Not many years ago the deposits of the Bank of England were far in excess of those of any other banking institution, but at the end of December last, with deposits of \$296,856,500, it ranked only fifth.

The aggregate liabilities and assets of all the banks of the country which publish accounts are set out below:

Liabilities.	Amount.	Per cent of total.	Assets.	Amount.	Per cent of total.
Capital paid up.....	\$405,943,964	6.6	Cash in hand, at Bank of England, etc.....	\$716,523,994	11.8
Reserve funds.....	235,324,474	3.9	Money at call and at short notice.....	716,523,994	11.8
Total.....	641,268,438	10.5	Bills discounted.....	758,624,085	12.5
Notes in circulation.....	213,055,370	3.6	Investments.....	1,165,298,025	19.2
Acceptances.....	244,424,829	4.2	Advances.....	2,350,490,301	38.7
Deposits and current accounts.....	4,948,685,452	81.3	Liability of customers for acceptances.....	244,424,829	4.0
Profit balance.....	29,529,922	.4	Bank premises, etc.....	125,078,783	2.0
Total liabilities.....	6,076,964,011	100.0	Total assets.....	6,076,964,011	100.0

More than 56 per cent of the income of bankers of the United Kingdom was derived in 1911 from advances to private customers, 22 per cent resulted from investments, 12 per cent was obtained from bills, less than 9 per cent from money at call and short notice, and 1 per cent from acceptances.

Income and Profits.

The gross income in 1911 of those banks which publish data was:

Assets.	Amount.	Rates of interest in 1911 per \$486.65.	Gross income.
Cash in hand, at Bank of England, etc.....	\$716,523,994	Nil.	Nil.
Money at call and at short notice.....	716,523,994	\$10.70	\$15,782,593
Bills discounted.....	758,624,085	14.11	22,001,446
Investments.....	1,165,298,025	17.03	40,786,136
Advances.....	2,350,490,301	21.73	101,855,845
Liability of customers for acceptances.....	244,424,829	3.65	1,829,805
Bank premises, etc.....	125,078,783	Nil.	Nil.
Total.....	6,076,964,011	14.60	182,235,825

English bankers last year obtained an all-round return of a little more than 3 per cent on the money left with them for employment, "as capital, reserves, or deposits." After deducting the interest paid to depositors, the gross profit was somewhat over 2½ per cent. The expenses of the bankers in 1911 were about \$63,264,500. The amount of profit available for dividend and for reserves was \$67,055,503, to which must be added the income tax either deducted from the gross profit or charged to expenses and which amounted to \$4,155,991. The total profit of British banks in 1911 was therefore \$71,211,494, which was equal to a return of 17.54 per cent upon the paid-up capital, 11.11 per cent on capital and capital reserves (the real capital employed), and only 1.17 per cent on the total funds employed.

GROWTH OF AUSTRALIAN FOOD EXPORTS TO CHINA.

[From Consul General George E. Anderson, Hongkong.]

One of the features of trade along the coast of southeastern Asia is the growing importation of many varieties of goods from Australia. The change has been notable, particularly within the past three years, and relates largely to food supplies of various sorts. It is worthy of remark that the supplies now coming from Australia are similar to goods produced by the United States and exported to some extent to various other portions of the world.

Australian meats and meat products have met with increasing sales in Hongkong and Chinese ports, the Philippines, and the East Indies for several years. There is considerable trade in fresh meat, including beef, mutton, and pork, and there is a growing demand for Australian hams and bacon, lard, game, poultry, and various other meats.

Meats, Fish, and Dairy Products.

In the fiscal year 1911 the Philippines took \$5,327,159 worth of beef from Australia, out of the \$5,479,104 worth imported, and the record in other fresh meats and game was similar, Australia furnishing \$5,850,440 worth of fresh meat of the \$6,031,359 worth imported. In ham and bacon Australia does not do so well; but its trade in these meats is mounting rapidly, and their importation into Hongkong affects American interests in that most of such imports heretofore have come from Great Britain and consisted very largely of American pork shipped in brine to England and there cured for the British trade.

Australian fish, generally cured in imitation of British brands of smoked fish, are coming into this market to a greater extent each year and bid fair to dominate the trade in another season or two. The goods are not quite up to the quality of the original, but the quality is very fair and the difference in price in favor of the Australian product is convincing. Fresh frozen fish, particularly salmon and similar varieties, are brought here in increasing quantities.

In fresh dairy products, also, Hongkong and most of the lower Asiatic coast and the East Indies are now supplied from Australia. Australian butter controls the situation to the exclusion of all other on the lower coast and of most other such products on the northern coasts, although five years ago the United States had the greater portion of this fresh-butter trade. Australian cheese, generally made in imitation of well-known English varieties and of very fair quality, is being imported in increasing amounts. Some cheese is brought from the United States and Canada, and American cheese, within the limits of its possible use here, is popular.

Fruit, Jams, and Honey.

Apples from the Pacific coast furnish the imports of such fruits during most of the year, but the Australian fruit supplements this supply, and imports are increasing yearly.

Perhaps one of the most significant features of this trade is the manner in which Australian preserves, jams, and similar goods are supplanting the products of other countries. For many years certain brands of jams and preserves have been sold here, as elsewhere in the world, as representative of a great British industry. Of late,

consumers have complained that the quality of these goods has deteriorated; but whether this is the case or not, Australian preserves and jams are being sold in direct competition with the English products and are capturing more and more of this business. American jams and preserves have never been able to get into this market to any considerable extent. Cheap American goods of this sort have not attracted British buyers, who have been accustomed to British wares, and the finer grades have been too expensive. That Australian preserves and jams have been able to enter this field, however, indicates a growing possibility of American trade in such goods here. It may be well to note that one of the comparatively few lines of trade in which American packing is still the subject of complaint is jams, preserves, and fruits in glass.

Australian honey is being sold in increasing quantities in Hongkong and the China coast ports. It comes into direct competition with California honey and has undoubtedly taken trade which, under other conditions, would have gone to the United States. The Australian honey is not of so good a quality as the California product and is not preferred by the fine trade, but it is about 25 per cent cheaper at present and is a fair product for the prices asked.

Competition of Australian Flour.

In some respects the most serious phase of this increasing Australian trade in its relation to the United States is that of flour. During 1911 Australia sent into Hongkong a total of 162,858 bags of flour, and Australian shipments of this commodity to Chinese ports direct were larger than ever before, the total supply from that Commonwealth for this part of the world exceeding all previous records, with the exception of the famine year 1907, when Hongkong took over a million bags of this flour.

Flour exports from Australia at the present time are particularly important to the United States in that they are going into the Philippines, the East Indies, and some portions of China, as well as to Hongkong, and are therefore supplying markets which have heretofore drawn upon the United States almost exclusively. How serious this competition is to become is yet to be seen, but the fact that the growth of late years has been steady and apparently not caused by other than normal conditions gives some promise of its permanence.

INDIA NEEDS COAL-HANDLING FACILITIES.

[From the official Indian Trade Journal, Calcutta.]

The committee of the Bengal Chamber of Commerce has addressed the Secretary to the Government of India, Department of Commerce and Industry, on the question of the deficiency of railroad facilities for the transport of coal. The recommendations of the committee are: (a) That an estimate should be prepared by the Railway Board of the number of wagons that the railways could at present profitably utilize, and that this number—believed by the committee to be about 8,000—should be ordered immediately in addition to the ordinary program; (b) that the question of the provision of a general reserve stock of wagons should be reconsidered; (c) that the question of quadrupling the East Indian Railway from Asansol to Bandel should be examined at once; (d) that the railways, the colliery proprietors, and the Calcutta Port Commissioners should unite in a determined effort to reduce the detentions to which wagons are now subjected, at the collieries, en route, and at the Kidderpur Docks; and (e) that a special officer should be appointed to make an investigation into and to report upon the equipment of the open lines.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 8999. Steel rails, fishplates, and rail rests.**—Supplementing a previous report, an American minister reports that officials of certain foreign railways will shortly invite bids for a large quantity of steel rails, fishplates, and rail rests for use in the construction of roads. Recently a contract was made with certain European contractors to furnish 14,521 tons of steel rails, 1,178 tons of fishplates, and 646 tons of rail rests. The contractors failed to comply with the provisions of their agreement, and the order has been canceled. If Americans can secure this order, an important future market would be opened, as much railway construction is contemplated. Copy of the complete report, giving further detailed information, will be sent to interested firms by the Bureau of Manufactures.
- No. 9000. Electric railway.**—Prominent business men in a country of the Far East are interested in plans for an electric railway which promises to be of considerable importance. The proposed line is to be 35 miles long, but extensions may easily be made to connect other important cities in the country in question. American manufacturers should make a special effort to supply the first materials purchased for this line, as this will likely determine the character of those which will be used in the branch lines to be constructed later. An American consul writes that the promoters of the line would like to receive figures showing in detail the cost of the necessary machinery and equipment. Copy of the complete report will be sent to interested firms by the Bureau of Manufactures.
- No. 9001. Kerosene-oil lamps.**—An importer and commission agent in the Near East has expressed to an American consul a desire to handle a line of kerosene-oil-burning lamps, and he is anxious to receive from firms in the United States prices, c. i. f., discounts, commissions, catalogues, etc. Correspondence may be in English.
- No. 9002. Railway materials.**—A report from an American legation states that certain foreign railway authorities are in the market for material needed for the construction of narrow-gauge lines. Bids are requested for 2,000 tons of rails, 102 tons of fishplates, and 132½ tons of rail rests. American manufacturers are urgently advised to make an earnest endeavor to look into this matter seriously with a view to take advantage of the opportunity offered, as well as the prospects for future orders.
- No. 9003. Bottles.**—An American consul in a Latin-American country has forwarded a copy of a letter from the secretary of an agricultural association in his district requesting to be placed in communication with some bottling works or manufacturers of bottles in the United States. Correspondence should be sent direct to the inquirer, and should be in English.
- No. 9004. Camel's hair shoes.**—The Bureau of Manufactures is in receipt of a communication from a business man in Germany requesting to be put in touch with American manufacturers or exporters of camel's-hair shoes.
- No. 9005. Automatic egg cookers.**—An American consul in a European country reports that a local business man has made inquiry for manufacturers of an automatic egg-cooking apparatus. Catalogues or correspondence addressed to the consulate will be forwarded to the inquirer.
- No. 9006. Self-starting and lighting devices and gasoline tanks.**—The manager of a firm which is the leading dealer in motor cars and maintains a garage in a foreign country informs an American consulate that his firm would like to act as local agent for self-starting and lighting devices; also gasoline tanks for motor cars.
- No. 9007. Agency for American goods.**—A report from an American consul states that a business man in his district desires to act as salesman or agent for different lines of American goods. His chief experience has been as salesman for tobacco, boots and shoes, paints, and plated ware, and in the future he especially desires to handle American products. He furnishes references.

DAILY CONSULAR AND TRADE REPORTS

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15th Year

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SCOTCH TRADE AND INDUSTRIES.

GLASGOW.

[By Consul J. N. McCunn.]

Notwithstanding that nearly all branches of industry in the Glasgow district were more or less affected throughout 1911 by labor troubles, the volume of trade and commerce was fairly satisfactory. This was largely accounted for by the exceptional year's work in the shipbuilding yards on the Clyde, the output of new ships and machinery for the year having broken all previous records. Shipbuilding, coal, and steel are the principal industries of the district and other industries are largely dependent on them. Unless labor troubles develop, still greater industrial developments are expected during 1912.

Output of Shipbuilding Yards.

The number of vessels built in Scotland last year was 557, with a total tonnage of 671,624, against 450 vessels of 420,250 tons in 1910. On the Clyde, in this consular district, 413 vessels, with a total tonnage of 630,583 were launched, against 358 vessels of 392,392 tons in 1910.

The tonnage launched from the Clyde yards during 1911 was distributed among the various types of vessels as follows:

Type.	Number.	Tonnage.	Type.	Number.	Tonnage.
Screw steamers	140	463,425	Tugs	9	1,159
Warships	16	75,024	Fishing steamers	9	1,008
Dredgers	19	13,219	Rock cutters	6	936
Combination steamer	1	12,927	Stern-wheel steamers	9	847
Paddle steamers	22	12,069	Sailing yachts	21	631
Barges and lighters	82	9,618	Steam launches and pinnaces	17	296
Motor boats	46	5,917	Other vessels	3	1,391
Hopper steamers	9	5,765			
Turbine steamers	2	3,351	Total	413	630,583
Geared turbines	2	3,000			

Notable among the new steamers was one built for the East Asiatic Co., of Copenhagen. This was an oil-engine vessel of 5,000 tons and 3,000 indicated horsepower, and the first of its type constructed on the Clyde. It has three masts, and the fumes from the engine room

are led inside the mizzen mast, and exhausted at a height of 48 feet above the deck, thus dispensing with a funnel, which is not required, even for exhaust purposes. The machinery of the two sets of Diesel oil engines, with which the steamer is equipped, costs about \$20 per brake horsepower more than steam power, approximately \$50,000 more than the machinery of a steamship of the same displacement and power. To offset this extra cost there is 1,000 tons additional cargo space, which it is estimated in two years will cover the extra expense and thereafter represent a large gain. The owners of the vessel reckon that the vessel will save \$25,000 annually in fuel.

Increased Shipping Demand.

An exceptional demand for tonnage created by the prosperity at Glasgow forced many of the prominent firms to augment their fleets by chartering. Freight rates maintained a higher standard than shipowners had experienced for a number of years, and dock laborers and seafaring men of nearly all classes were paid higher wages, owing to the demand for labor being frequently in excess of the supply. Brief interruptions due to labor disputes arrested the progress of trade at times, and in some instances diverted traffic to other ports.

The aggregate tonnage of vessels using the port for the year ended June 30, 1911, was 12,500,000 tons, an increase of about 144,000 over the preceding year, while the imported and exported goods amounted to about 10,360,000 tons, an increase of 262,000 tons. In the export trade, which was brisk, the heaviest shipments were coal and iron.

Some of the Principal Imports.

The latest statistics available of the total imports and exports of the port are for the 11 months ended November, 1911, and therefore the following comparison of the trade is for that period compared with the whole of 1910.

The grain imports at the end of November, 1911, amounted to 516,226 tons, against 519,861 tons in 1910. The imports from European ports amounted to 92,656 tons; from North America, 325,543 tons; from Argentina, 19,023 tons; from Australia, 5,691 tons; from India, 59,168 tons; from New Zealand, 2,512 tons; from China, 7,433 tons; and from South Africa, 4,200 tons. The imports of wheat, flour, peas, barley, and rye decreased, while those of oats, oatmeal, oil-seeds, beans, and maize increased. Wheat imports amounted to 167,451 tons, compared with 190,861 tons in 1910 and 163,785 tons in 1909.

There has been a gradual decline in the imports of flour during the past five years, due to the development of the milling industry in this country. The imports for 1911 amounted to 110,702 tons, compared with 113,020 tons in 1910 and 32,199 tons in 1909. Imports of maize amounted to 97,469 tons, as compared with 81,122 tons in 1910, and oats 46,605 tons, compared with 40,134. The foregoing figures of the maize imports refer to over-sea cargoes, in addition to which a considerable quantity was brought in coastwise from Southampton.

Receipts of Fruit and Minerals.

A marked feature of the import trade for 1911 was the great increase in the imports of fruit, owing to large consignments of Canadian apples, and a substantial increase in imports from Mediterranean ports.

The imports of minerals showed a slight falling off, with the exception of nickel ore. The more profitable freight rates paid on other cargoes is given as the reason for the decline. The total imports of

minerals of all descriptions, including iron ore, limestone, pig iron, nickel ore, etc., decreased 278,363 tons. Iron-ore imports amounted to 1,213,242 tons, as compared with 1,414,561 tons in 1910; and nickel ore 32,103 tons, compared with 41,383. During the first part of December, however, over 12,000 tons of nickel ore were discharged, so that the year's total will lead by several thousand tons the total for the preceding year.

The Coal Situation.

The brisk coal trade anticipated for 1911 did not materialize. The work in arrears at the shipyards owing to the labor disturbances at the close of 1910, the prospects of an exceptionally busy year in the booking of orders for new ships owing to expansion of the over-sea trade, and other signs tended to justify the belief that last year was to prove a prosperous one for the coal industry.

Nevertheless prices dropped during the first months of the year, reaching the lowest point in May and June, after which there was a gradual increase to the end of August, when a sharp advance took place in the prices of all classes of coal. The prices ruling in the Glasgow district after August were 48 to 84 cents per ton higher than in June and 24 to 48 cents higher than at the end of 1910. Splint coal commanded \$2.45 per ton at the beginning of 1911, declining to \$2.15 by June, and reaching \$2.90 per ton in December.

There were 9,736,635 tons of Scotch coal shipped to European countries during 1911, 645,676 tons to countries outside of Europe, and 6,364,500 tons to home ports and for bunkering purposes, making total exports 16,746,811 tons, compared with 16,309,491 tons for 1910. The European shipments were as follows during 1910 and 1911:

Countries.	1910	1911	Countries.	1910	1911
	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>
Belgium.....	161,801	194,063	Russia.....	700,307	840,887
Denmark.....	1,301,926	1,287,721	Spain.....	157,328	210,107
France.....	896,593	906,003	Sweden.....	1,179,135	1,152,783
Germany.....	2,900,769	2,820,374	Other countries of Europe.....	371,436	349,261
Italy.....	867,029	943,152			
Netherlands.....	476,477	460,058	Total.....	9,617,257	9,736,635
Norway.....	604,456	573,226			

Exports of coal from Glasgow have been increasing steadily for a number of years, and foreign shipments were expected to reach 2,000,000 tons by the end of 1911, compared with 1,900,599 tons for 1910. Foreign shipments at the end of November amounted to 1,845,098 tons; coastwise shipments, 510,741 tons; and bunker shipments, 1,382,554 tons.

Iron and Steel Trades.

The lockout in the shipyards in the early part of last year caused an accumulation of finished material in both the shipyards and steel works, the effects of which were not removed until about the end of April of last year. The steel-making trade on the whole enjoyed a fair year. The plate mills were subjected to considerable competition.

The heavier sections, which are most profitable to roll, have, through this competition, in many instances been lost to home producers. With a view to overcoming this foreign competition, the Scotch and English steel makers jointly devised and put into operation a rebate system. This system met with strong opposition at the hands of the steel merchants, and for a time they refused to buy under the new conditions. A firm demand resulted in the development of a buying

movement about the middle of December, and contracts aggregating over 250,000 tons were placed for delivery in Scotland.

At the beginning of 1911 the price of ship plates was \$33.45; boiler plates, \$37.10; and angles, \$31.63 per ton, all delivered Clyde or equal, less 5 per cent. These rates remained in operation until December 12, when an advance of 5 shillings (\$1.21) per ton was made. The prices at the beginning of April of the present year were: Ship plates, \$34.66; boiler plates, \$38.31; and angles, \$32.84 per ton, all delivered Clyde or equal, less 5 per cent.

Output and Shipments of Pig Iron.

The year 1911 proved unsatisfactory to makers of Scotch pig iron. Quotations favored buyers almost throughout the year, enabling them to a great extent to purchase at their own terms. The cost of production, labor, and freights, however, steadily increased and only at the close of the year did the manufacturers realize prices equivalent to the value of their commodity.

The output of Scotch pig iron during last year was 1,401,799 tons against 1,414,461 tons for 1910, of which 1,099,956 tons compared with 1,054,886 tons were consumed in the Scotch foundries and the malleable iron and steel works. The imports from England were 614,000 tons, a decrease of 5,500 tons compared with 1910. The exports of pig iron, including foreign, coastwise, and by rail, amounted to 312,141 tons against 303,101 tons for 1910. The principal shipments to foreign countries during 1911 were as follows: Australia, East Indies, China, and Japan, 55,665 tons; British North America, 19,904 tons; Italy, 17,044 tons; Germany, Austria, and the Netherlands, 17,043 tons; Russia and Turkey, 8,021 tons; Belgium, Denmark, Sweden, and Norway, 6,598 tons; Spain and Portugal, 2,883 tons; France, 1,558 tons; and the United States 609 tons. There were 320,987 tons of pig iron on hand at the shops at the end of last year. The number of furnaces in blast at the end of the year was 85, as follows: Ordinary, 40; hematite, 39; and basic, 6.

Hematite and Malleable Iron.

The heavy accumulation of steel and hematite stocks, owing to the strikes and lockouts in the shipyards in the autumn of 1910, limited the buying of hematite during the first half of 1911. The pressure of steel scrap on the market, and the scarcity of labor prevented the depletion of these stocks as quickly as was generally anticipated. Scotch hematite fell steadily from \$17.52 in January to \$15.20 in September, with the exception of a brief rally in August.

Conditions in the malleable iron trade of Scotland were unsatisfactory during the greater part of last year. In the early part of the year prices were fairly satisfactory, but owing to the scarcity of orders the factories were operated but four and five days a week and close competition among the manufacturers for the export trade resulted in unprofitable transactions.

Locomotive and Sugar Machinery Industries.

The depression that existed in the locomotive industry during 1910 continued throughout 1911, with the exception of a slight improvement in June and August, which gave hope of a revival in the trade. Orders for future delivery, sufficient to warrant continuous employment for the next few years are being freely booked, and unless some unforeseen obstacles arise a healthy revival of the industry is expected.

On the whole, the sugar-machinery industry had a satisfactory year. Valuable orders were completed for factories in St. Kitts (West Indies), Brazil, Barbados, and Formosa, as well as for additions to factories in Natal, Argentina, Java, Cuba, St. Croix, Dominican Republic, and Portuguese East Africa. A good business was also done with Spain, Portugal, Canary Islands, Philippine Islands, Porto Rico, Mauritius, Fiji Islands, and British West Indies.

Conditions in the Textile Trade—Cotton Spinning.

Cotton manufacturers in Glasgow worked under adverse circumstances during most of last year, the principal difficulty being the high price of raw material early in the year, when American cotton stood at 16 cents and Egyptian at 22 cents. Toward the close of 1911 they were 10 and 18 cents, respectively. Buyers of white cottons, lappets, plain, fancy, and madras muslins, and harness brocades and handkerchiefs only purchased sufficient quantities to meet pressing demands. The political disturbances in China and some of the European countries materially reduced shipments to those countries. The high price of yarns early in the year operated against the lace manufacturers, while toward the close of 1911 conditions improved. The Australian and Canadian demand for zephyrs, shirtings, dress pieces, and various other classes of colored cottons was exceptionally good, but the American demand for white and colored goods did not meet expectations. Exports of fancy cloths to India increased over 1910, but shipments to Japan decreased, the demand being irregular. Trade with South America maintained a good average.

Cotton spinning, which was at one time an important industry in Glasgow, is now carried on only to a limited extent. The industry was in a much more flourishing condition at the end than at the beginning of 1911. This was especially true of spinners using American yarns, in which a good business was done in the lower counts. The high price of Egyptian cotton, on account of the short crop, caused weavers to use American yarns where otherwise Egyptian would have been employed. The margin of profit in the spinning industry throughout the year is said to have been small. The thread mills at Paisley report an exceptionally good year, the home and foreign trade being well maintained.

The Timber Market.

The timber trade in the west of Scotland during 1911, although an improvement over the two preceding poor years, did not come up to the early expectations of the year. The chief factors contributing to the unsatisfactory consumption of timber were the continued depression in the house-building trade and the scarcity of orders and low prices in the furniture and other wood-consuming industries. There was a steady demand for shipbuilding material and a moderate demand by pattern makers and wagon and carriage builders.

Russia promises to be a serious competitor with Canada in the timber market here. Spruce from Riga now comes direct to Glasgow and the Clyde ports. Formerly this trade was confined to ports on the east coast of Scotland. As Riga has a much lower freight rate to Clyde ports than Quebec, the Canadian timber imports, which have fallen off materially in recent years, will in all probability show a further decline. The high price of Canadian pine makes it almost prohibitive for many purposes for which it was heretofore in great

demand, and rock elm. owing to advanced prices, is only used for purposes for which no satisfactory substitute has been found.

The demand for oak logs was better than in previous years, and pitch pine and teak for shipbuilding purposes were in good demand and firm in price. A firm demand for Canadian birch prevailed, owing to hardwood buyers being attracted by its cheapness and utility. A rise in the price of birch is expected to follow. In furniture woods, mahogany advanced in price under a firm demand and keen competition. Plain oak was in fair demand, but walnut, quartered oak, ash, and canary wood found a weak market. California redwood and greenheart and Oregon and Kauri pine were marketed at prices averaging those of recent years. All stocks are exceptionally low, consequently prices are likely to be well maintained.

A good average year in shipbuilding, coupled with a revival in the building trade, would stimulate the timber industry in this district, and insure a large volume of business at good margins.

Shipments from Glasgow to United States and Possessions.

The following table shows the principal items invoiced through the American consulate at Glasgow to the United States, Philippine Islands, Porto Rico, and Hawaii for 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
TO UNITED STATES.			TO UNITED STATES—CON.		
Aluminum.....	\$259,751	\$129,996	Silk goods.....	\$19,486	\$4,126
Automobiles and parts.....	2,053	565	Steel and steel ware.....	40,565	27,997
Boiler material.....	14,081	962,526	Thread.....	37,716	80,329
Books.....	94,338	49,803	Union goods (cotton).....	37,912	87,559
Brass.....	50,271	6,395	Tapestry.....	2,255	4,634
Brattice cloth.....	31,241	17,022	Timber.....		31,464
Carpets and carpeting.....	40,437	60,660	Whisky.....	935,332	855,600
Cement.....	967	1,078	Wines and liquors.....	11,889	8,540
Chemicals:			Wool.....	778,299	497,281
Fertilizers.....	522,119	464,274	Woolen goods.....	71,299	45,221
Ammonia.....	3,326,050	2,696,914	Zinc and copper goods.....		1,006
Potash.....	15,996	22,416	All other articles.....	103,646	6,670
Clay tobacco pipes.....	30,080	26,705			
Coal and coke.....	44,027	53,291	Total.....	10,967,630	10,144,937
Cotton piece goods:					
Colored.....	282,307	278,581	TO PHILIPPINE ISLANDS.		
Fancy.....	85,224	49,852	Cement.....	1,315	223
Printed.....	106,359	115,532	Chemicals.....	7,358	665
Other.....	1,015,618	801,000	Cottons.....	351,360	227,908
Fire-clay goods.....	19,556	14,773	Fire-clay goods.....	4,370	3,873
Fishing gut and tackle.....	39,236	43,418	Iron and steel ware.....	173,915	87,434
Flax.....	32,755	42,919	Iron (pig).....	7,144	7,349
Glue, gum, and paint.....	70,684	41,730	Muslin.....	11,192	22,663
Gutta-percha and balata.....	187,772	42,068	Machinery.....	101,855	369,293
Hemp and jute goods.....	24,457	27,821	Oils and paints.....	14,331	16,883
Herring.....	369,638	459,914	Whisky.....	16,514	22,295
Hides and skins.....	117,823	155,324	Thread.....	249,437	116,381
Horses and ponies.....	18,614	48,330	All other articles.....	7,825	6,645
Household effects.....	15,264	15,726			
Iron and ironware.....	23,735	6,804	Total.....	946,616	881,612
Iron (pig).....	159,243	24,989			
Lace goods.....	7,541	2,516	TO PORTO RICO.		
Leather goods.....	46,967	50,204	Books.....		850
Linen goods.....	13,163	20,168	Fire bricks.....		530
Linoleum.....	10,909	6,566	Machinery.....		6,921
Machinery.....	416,713	95,741	Whisky.....		1,863
Muslins.....	383,964	289,668	Total.....		10,164
Oils:					
Creosote.....	253,610	623,657	TO HAWAII.		
Other.....	261,297	114,739	Machinery.....		264
Old ropes.....	15,060	12,112	Pig iron.....		3,750
Paper and paper stock.....	354,751	337,060	Whisky.....		3,463
Pictures.....	1,852	6,022	Total.....		7,477
Post cards (pictorial).....	2,650	2,035			
Provisions.....	33,412	133,040			
Scientific instruments.....	44,258	9,344			
Seeds and fruits.....	28,136	26,392			
Sheep casings.....	55,713	84,830			

Owing to the uncertain state of trade, the exports from Glasgow to the United States fell \$822,693 in value as compared with 1910, but they were \$1,570,781 in advance of 1909. The items showing the greatest decline were chemicals, machinery, cotton piece goods, gutta-percha, aluminum, pig iron, wool, and muslins. There was a large increase in the shipments of boiler material, creosote oil, provisions, union goods, and thread.

The exports to the Philippine Islands continue to decline, the figures for 1911 showing a decrease of \$73,004 compared with 1910 and \$218,685 compared with 1909. The principal decreases were in cottons, thread, and iron and steel. There was a large increase in the shipments of machinery to the Philippines. There were articles valued at \$10,164 and \$7,477 invoiced to Porto Rico and Hawaii, respectively, last year, while none were declared to these islands for 1910.

The Sugar Industry at Greenock.

The six sugar refineries in Greenock were in operation throughout the year, the output for 1911 surpassing the large production of 1910. The year opened with heavy supplies of raw material available from the large beet crop of the previous season and bright prospects of a material increase in cane supplies. There was a steady demand for Greenock refined sugar in spite of sharp foreign competition. The output for last year was 221,150 tons, notwithstanding an increase of nearly 100,000 tons in the imports over 1910.

When the Brussels convention came into operation, the output dropped to 120,570 tons, but since then it has steadily increased each year until it reached the record figures of last year. Under the convention Great Britain places no restriction on imports from any part of the world, the limitation of 200,000 tons from Russia having been imposed by other Continental signatories.

An important fact which Greenock refiners have to contend with is that refined sugar from German and Dutch ports enters Britain at lower rates than Greenock refiners can obtain for their product throughout the United Kingdom. Aside from the home trade, a good export trade is carried on with Canada and the north of Europe ports, and to some extent with South Africa, Portugal, and Italy. Exports to Canada in 1911 totaled 6,500 tons and to north of Europe ports 4,794 tons.

The prices of sugar, which were steady and moderate during the first half of last year, rapidly advanced, owing to the drought in the principal beet-growing districts of the Continent, and by the end of August they were \$4.50 per hundredweight of 112 pounds f. o. b., the highest point reached since 1893.

Exports from Greenock to United States.

There was no sugar invoiced through the Greenock agency for shipment to the United States last year, hence the large decrease in the value of the declared exports compared with 1910. The principal items for 1910 and 1911 were as follows:

Articles.	1910	1911	Articles.	1911	1911
Furniture:			Pigskins.....	\$2,187	\$1,201
Antique.....		\$146	Sugar.....	377,701	
Household.....		1,436	Whisky.....	480	3,778
Hogskins (tanned, dressed)....	\$10,383	4,578	All other articles.....	1,779	937
Leather.....	6,203	10,856	Total.....	398,733	23,215
Magnesia, calcined.....		283			

Conditions in the Troon District.

The chief feature of the commerce and industries in the district comprising the Troon agency during last year was the exceptional prosperity in the shipbuilding trade. There was also a large increase in coal shipments, which is accounted for by several new collieries having been opened up.

The textile industries did not participate in the general prosperity, owing to scarcity of raw material and its high prices. During the latter part of the year the market was supplied with a large quantity of cotton from the United States, and all the works were fully employed during the last two or three months of the year. There has been a noticeable falling off in the American market for muslins and other textile fabrics, and increasing demand from the British colonies, especially Canada. The following is a list of the articles invoiced at the Troon agency for the United States during 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Books and tracts.....	\$210	\$585	Linings.....		\$331
Canvas, hemp.....	1,562	2,298	Plants.....	\$3,432	3,143
Carpeting and rugs.....	52,131	38,255	Seeds, grass.....	2,105	1,450
Cloth, cotton.....	69,157	90,309	Shawls, fringed.....	3,552	
Costume cloth.....	1,551		Tapestry.....	3,894	
Cotton lining.....	1,132	1,095	Thread, linen and twine.....	119,233	109,286
Curling stones and handles.....	793	765	Whisky.....	29,745	42,743
Curtains, crepe, madras, and muslins.....	165,878	160,928	Woolen caps and scarfs.....	1,023	2,248
Flax, dressed.....	4,365	31,080	Worsted and woollens.....	8,811	22,472
Grindstones.....	112	481	Yarn, linen.....	2,987	4,539
Hogskins, dressed.....	952	1,090	All other articles.....	5,278	240
Horn and gritstones.....	5,638	6,164			
Household goods.....	402	457	Total.....	483,943	519,959

American Implements on the Market—Iron-Ore Imports.

American machinery for agricultural purposes continues to be in general use and farmers are largely taking advantage of the frame drills of the forced feed type. Parts of the various agricultural implements of American manufacture are now kept in stock by certain wholesale houses, and farmers and others have no difficulty in getting repairs executed. Joiners and other artisans' tools of American production are largely used and are stocked in all the principal ironmongers in the chief centers. These articles and other American produce are in general demand, but as they are distributed throughout the district from Glasgow and Liverpool, reliable statistics as to quantities are not available.

During the past year no American-owned vessel arrived at any of the ports in Troon district. Norwegian vessels entered largely into the carrying of timber and pitwood, and a few Spanish steamers were engaged in the iron-ore trade. The iron-ore supply from Spain has been diminishing during the last few years, and new supplies are coming from Norway, Greece, France, and Newfoundland.

Industries of the District—Wages.

The principal industries in the district on the seaboard are shipbuilding, marine engineering, sawmilling, and coal exporting, the latter commodity going principally to Ireland and the Continent. There are factories for the manufacture of explosives and chemical and iron works.

The principal industries inland are coal mining and iron production, the works of the latter being adjacent to the collieries and also con-

venient to the seaports. The other inland industries are mainly textile, comprising the manufacture of curtains, muslins, carpets, rugs, and thread. Agriculture is carried on successfully on the small holdings system under tenancy. The soil is rich throughout, and potatoes, hay, and corn are cultivated with continued success. The products are principally consumed in the home markets. Cattle raising and horse breeding are also carried on.

The following are the current rates of wages in the district per 5½ days as ascertained from reliable sources: Bakers, \$7.50; blacksmiths and masons, \$10; engineers, iron founders, ship carpenters, joiners, miners, plasterers, plumbers, and painters, \$9; slaters, \$8.50; and lace weavers, \$7. Ship platers and riveters, on piece work, can earn \$10 per week of 5½ days.

DUNDEE.

[By Consul E. Haldeman Dennison.]

Dundee is the third largest city in Scotland in point of population but second in commercial influence. It is served by two railroads, by which communication is maintained with England and all parts of Scotland. There is also regular communication by sea with London, Liverpool, Manchester, Newcastle, Hull, Southampton, Cardiff, and Belfast, as well as with Hamburg and Rotterdam.

The corporation owns the water supply, gas and electricity works, tramways, markets, public baths, cemeteries, and slaughterhouses. It is a city dominated by one industry.

Industrial Conditions.

The character of the city, its industrial conditions, and its place in the commercial world are all determined by the fact that it is the seat of the jute trade. It is also the center of the seal and whale fisheries, but much of the traffic of the port consists of the import of the raw material necessary to the predominating industry and of the export of the finished article. Dundee is also an important center of the linen trade, but compared with jute, linen plays only a small part in the trade of the city.

Notwithstanding substantial business connections, skill in productive methods, and expert knowledge of requirements, unfortunately the Dundee jute trade has occupied an unenviable position between the rivalry of the Calcutta industry and competition at home and on the Continent. Industrially, the city did not make an advance of consequence last year. The shipbuilding and building trades have been declining for several years, although the former industry improved somewhat last year. Work in the foundries, upon which so many depend, was unsatisfactory.

According to data recently issued by the board of trade showing the cost of living in the principal cities, it was shown that, excepting London, the cost of living was greater in Dundee than in any other city of the United Kingdom. This was due, however, to the unduly high prices for coal and bread.

Imports and Prices of Jute.

The imports of jute into Dundee from Calcutta and Chitagong, British India, last year were 1,085,281 bales of 400 pounds each against 1,125,891 bales for 1910. Of the total imports last year 42,027

bales, compared with 19,612, bales, were reexported. There was a wide range in the prices of jute last year, varying from \$87.60 to \$133.83 per ton for native first marks. For the past two seasons there has been a scarcity of fine jute, and several of the cargoes discharged were badly damaged.

Spinners and weavers of jute yarn and cloth experienced in 1911 one of the worst years in the history of the trade. It was not until the last three months of the year that any improvement was perceived. The output for the year was curtailed beyond all previous records, and two mills went into liquidation. This condition was largely attributed to the excessive output in Calcutta, the difficulty being intensified by a short crop of jute, with a consequent rise in prices for the raw material.

Prices of jute, which had advanced considerably when the year opened, were expected to remain firm, and the local spinners were not prepared for the subsequent rise. From January to May prices continued to advance, throwing the jute trade into a state of chaos and compelling the closing down of looms and spindles. New crop prospects exerted their influence, and raw jute prices of the 1910-11 crop fell steadily during June and July. Prices of yarns and cloths, which had never been able to approach the equivalent of jute, receded in sympathy. It was not until September that any signs of improvement were observed. A further reduction in the Calcutta mill output brought supply and consumption more on a parity.

Jute Yarn Trade.

During the last three months of the year there was an improvement in both the yarn and cloth trades. Most establishments had begun to run full time and some works which had been closed restarted. The new crop provided a good supply of medium and low qualities, but fine jute was scarce. Prices of all grades, and particularly of fine jute, remained high, however. There was a fair demand for jute yarns in the lower qualities and the prices obtained were not so unremunerative as in the beginning of the year. Prices obtainable for the finer yarns, however, were insufficient to cover cost of production.

There were exported last year 49,333,700 pounds of jute yarns, valued at \$3,426,449, compared with 58,852,700 pounds, valued at \$3,393,128, for the previous year. Germany was the only country showing increased purchases. The principal shipments for 1910 and 1911, respectively, were as follows: To United States, 5,399,200 and 1,126,000 pounds; Brazil, 25,614,100 and 22,024,000 pounds; Germany, 1,296,100 and 1,683,800 pounds; Spain and Canaries, 1,867,200 and 1,117,100 pounds; and other countries, 24,676,100 and 23,382,800 pounds.

There was a wide fluctuation in the prices of jute yarns during last year. The quotations, December 31, were as follows: Common cops, 46.13 cents; spools, 47.65 cents; 24-pound weft, 4.81 cents; and 8-pound Rio weft, 54.74 cents.

Shipments of Jute Cloth.

In jute cloth the feature of the last quarter of the year was an unexpected demand from River Plate ports for bags. As a rule, these bags are sewn in Argentina from Calcutta cloth, but the South American buyers had deferred making their purchases. Owing to an unexpectedly large wheat crop, an unusually large supply of bags

was required, and the Argentine factories were unable to cope with the demand, therefore all available hessian bags on the Dundee market were purchased. This revived the narrow-cloth section of the trade considerably. All stocks were cleared out, full time resumed, and standing looms restarted. There was also a demand for sackings, baggings, and tarpaulins in the closing months of the year. The price of 10½-ounce 40-inch cloths at the end of last year was 4.73 cents; 8-ounce 40-inch cloth, 4.22 cents; and 16-ounce sack, 6.2 cents.

The shipments of jute piece goods last year amounted to 149,450,300 yards, valued at \$9,951,992, compared with 176,401,100 yards, valued at \$10,034,887, for 1910. In this item, as with jute yarn, Germany was the only country showing an increase in purchases for last year. The following table shows the exports to the principal markets for 1910 and 1911:

Destination.	1910	1911	Destination.	1910	1911
	<i>Yards.</i>	<i>Yards.</i>		<i>Yards.</i>	<i>Yards.</i>
United States.....	83,834,600	66,893,900	Germany.....	1,308,900	2,935,100
Argentina.....	11,413,400	8,384,300	New Zealand.....	2,395,500	2,076,600
Australia.....	5,495,900	3,020,000	All other countries....	46,610,700	43,718,100
Brazil.....	797,800	246,300			
Canada.....	23,406,600	21,286,800	Total.....	176,401,100	149,450,300
France.....	1,137,700	889,200			

The Linen Trade.

The great rise in the price of flax consequent to the poor crop of 1910 made business unprofitable in the spinning of yarn and manufacturing of linen. Prices of the raw material reached a higher level than at any time during the past decade, while yarns and cloth were difficult to dispose of at prices corresponding with the cost of production. The feature of the manufacturing branch was the steady demand for canvas and other heavy fabrics, Government contracts predominating. The demand for fine fabrics was impeded by the excessive rise in values. In the closing months of the year, however, prices of raw material fell to a comparatively reasonable level.

During the year there were imported 17,588 tons of flax, tow, and codilla, as compared with 18,189 tons in 1910 and 16,439 tons in 1909. The flax and tow that had to be utilized in the first half of the year were of inferior quality, which, nevertheless, commanded high prices. The new crop prospects somewhat relieved the market, and there was a gradual decline in prices until November, when the market utterly collapsed, continuing throughout December.

Government orders created a good demand for duck yarn, the price of which rose to 22 cents per pound. With a larger and cheaper supply of raw material, there is every reason to believe that the trade in 1912 will show great improvement. The value of the exports of flax and linen yarn to the United States showed large increases, while those of household linens and linen piece goods decreased by \$91,344.

Increased Output of the Shipbuilding Yards—Marine Engineering.

The Dundee shipbuilding firms shared in the general prosperity which the industry enjoyed throughout the British Isles during 1911. From the yards of the Caledon Co. and the Dundee Shipbuilding Co. 16 vessels were launched, with a total tonnage of 16,227, and 14 barges, as compared with 5 vessels, of an aggregate tonnage of 5,922, and 6 barges in 1910, when the industry was greatly disturbed by labor

troubles. The outlook for 1912 is also most promising. The Caledon Co. had orders for 7 vessels at the end of March of this year, of an aggregate tonnage of 10,385, including a large oil-carrying steamer for trade on the American Great Lakes. The Dundee Shipbuilding Co. has much work on hand, including an ice breaker and mail carrying steamer for Newfoundland, a passenger and cargo steamer for the colonies, and two schooners for a South American firm.

Marine engineering, in consequence of the great improvement in shipbuilding, showed considerable advance. Ten sets of engines were completed, with an aggregate indicated horsepower of 14,770, as compared with 7,800 for the previous year. The prospects for 1912 are considered good.

Shipping of the Port—The Whaling Industry.

Since 1907 there has been a steady decrease in the tonnage on the register of the port of Dundee. In that year there were 119 vessels, with an aggregate tonnage of 99,338. At the close of 1911 the number of vessels on the register was 95, of 71,673 tons. For the greater part of this period shipping, owing to various causes, was unprofitable, and the tendency was to sell rather than to buy ships. For some time past, however, there has been a great improvement in freights, and local shipowners will probably be tempted to add to their fleets during the next 12 months.

The year 1911 was one of the most unprofitable on record for whale fishing. The total produce of the Dundee whaling fleet was only 69 hundredweight of whalebone and about 139 tons of oil, compared with 237 hundredweight of whalebone and 287 tons of oil in 1910. The fleet consists of 8 vessels. During recent years the product of the Arctic brought home by the local vessels has greatly decreased, and last year the visit of the whalers to the northern fishing grounds was practically a failure, and therefore it is probable that none of the vessels will depart for the Arctic this year. About 30 years ago one ship would bring home as much bone and oil as the whole fleet does now.

The Machinery Trade—Fruit Preserving.

Machinery manufacturers had a quiet year owing to the depression which existed in the various textile trades. Orders were largely limited to the replacing of machines which had become worn out, the exception being orders for machinery for extensions of jute mills on the Continent, and these latter orders were just sufficient to keep the machine works moderately employed. There were practically no new factories erected in Calcutta, which has been for years the only large market for jute textile machinery, and consequently there was no immediate demand for machinery. A new factory for the manufacture of canvas is being erected in Dundee, and the preparing and weaving machinery is being made in this city.

The fruit preservers report that owing to the drought last summer the fruit ripened early and the market was glutted, and consequently prices of preserves were not up to the average. Gooseberries, which come in at the first of the season, were a short crop and prices were \$3.40 to \$3.65 per hundredweight. Strawberries the first of the season were \$6.07 per hundredweight, but owing to the dry weather they increased to \$8.51, but there were large supplies the latter part of the season, and prices declined considerably. Raspberries were \$9.72 per hundredweight when first entered on the market, but owing to the rapidity of growth in fine weather, they dropped to \$7.29.

Black currants were a fair crop, but they are always more or less scarce in this district and considerable quantities were imported from France. They ranged in price from \$8.51 to \$9.72 per hundredweight and even higher in some instances. Red currants were a good crop, and prices were \$3.89 to \$4.38. Plums would have been a good crop but for the dry weather, which caused a great many of them to fall to the ground before maturing. About \$3.40 per hundredweight was paid for the best plums.

Effect of Drought on Crops.

Owing to the light hay crop and poor grazing due to the drought, dairymen suffered heavy losses, and graziers and feeders were put to considerable expense for feedstuffs. The root crops, which showed great promise at the beginning of the year, suffered from lack of moisture as the season advanced, and turnips in some districts were almost a complete failure. The grain crops were naturally affected by the unusual dryness and the yields were correspondingly light. In most districts wheat was the principal crop of the season, both as regards yield and quality. Barley and oats were far short of the average yield, and there was a shortage of straw. The potato being a sun plant, withstood the drought better than any other plant, and the crops in Scotland were generally satisfactory, there being little disease among the tubers.

Owing to the short American crop, large quantities of potatoes were shipped from this district during the latter part of the year. One ship, with a cargo of potatoes only, went direct from Dundee to New York. This outlet was opportune, as with the increased acreage under potatoes and the larger average crop it would have been impossible for all the potatoes to be consumed in the home markets.

Exports to United States and Possessions.

The total value of exports from the Dundee district to the United States as invoiced at this consulate for 1911 was \$7,554,458, as compared with \$7,587,785 in 1910. Jute yarn, bagging, and burlap exports showed considerable declines, while those of raw jute rose from \$60,197 to \$208,402. In the linen trade flax and tow exports reached record figures, but as in the case of jute manufactured goods showed considerable decreases, except in yarn, which increased in value from \$242,320 to \$337,539. The following table shows the exports to the United States in 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Cotton, manufacturers of:			Jute, and manufactures of—Continued.		
Cloths.....	\$10,346	\$5,147	Yarn.....	\$232,738	\$70,305
Yarn.....	561	12,112	Other.....	1,311	
Duck, sail.....	18,603	50,104	Machinery.....	31,865	37,952
Flax, and manufactures of:			Paddings.....	634,722	639,048
Flax and tow.....	434,727	582,358	Paper.....	5,109	1,594
Linen goods.....	1,210,570	1,119,226	Paper stock.....	48,861	31,814
Yarn and twine.....	242,434	337,539	Preserves.....	50,879	63,495
Gauge glasses.....	39,115	34,098	Printing material.....	35,674	876
Golf goods.....	9,468	4,793	School bags.....	3,638	3,681
Hemp, and manufactures of.....	1,747	5,282	Spirits, whisky.....	203,701	217,382
Hides and skins.....	16,027	21,864	Vegetables, potatoes.....		140,621
Jute, and manufactures of:			Whalebone.....		10,103
Raw.....	60,197	208,402	Wool and hair.....	90,555	68,143
Bagging.....	300,141	270,479	All other articles.....	22,914	12,117
Burlaps.....	3,834,841	3,545,897			
Carpeting.....	46,981	53,146	Total.....	7,587,785	7,554,458

The exports to Porto Rico were valued at \$55,669 compared with \$41,239 for 1910. Jute bags represented \$48,149 last year and linen piece goods \$6,449. The shipments to the Philippines amounted to \$11,483, a small gain compared with 1910, and were made up of duck sail valued at \$6,609, whisky \$4,084, and other articles \$790. Whisky was the only item invoiced to Hawaii, which amounted to \$5,064.

ABERDEEN AGENCY.

[By Consul E. Haldeman Dennison, Dundee.]

Aberdeen is connected with other parts of Scotland and England by three railroads. By means of steam packets it has communication with the leading English ports and with the north of Scotland, as well as with the Orkneys and Shetlands. Like Dundee, the city owns the water, gas, electric works and tramways.

The port has considerable and increasing trade and it is the center of the Scottish fishing industry. Shipbuilding is one of the important industries, and considerable business is done in the textile trade. Other industries include the manufacture of combs, paper, preserved provisions, boots and shoes, motor body and coach building.

The Quarrying Industry.

The deposits of granite which are stored in this region have become a source of great profit to the city. This material enters largely into the construction of its buildings, docks, and bridges, and a large export trade has been developed; also an auxiliary trade, that of granite polishing. Aberdeen not only polishes its own granite, but large quantities of foreign granite are imported for polishing.

The quarrying industry, however, was depressed last year. Building material, on account of the stagnant state of the building industry, was in poor demand, and there was a large market for other classes of stones. The quantity of granite setts exported during the year amounted to 19,067 tons, compared with 19,073 tons in 1910. The decrease is small, but the 1910 exports were a decrease of 12,708 tons compared with those for 1909. The United States, United Kingdom, and Canada are the principal markets in the monumental trade. The decrease in the American shipments last year was due to the increased prices demanded. The trade with the Continent in polished fronts continues to hold its own in competition with France, Belgium, and the Netherlands. The imports of foreign granite increased from 25,467 tons in 1910 to 30,386 tons last year.

Shipbuilding—Horn Comb Industry.

During last year 48 vessels were launched at Aberdeen, against 34 in 1910 and 26 in 1909, and the total tonnage was 9,607, 10,488, and 6,237, respectively. The decrease in the tonnage for last year, although an increase in the number of vessels built, was accounted for by the fact that in 1910 one steamer was launched representing a tonnage of 4,823, while in 1911 the largest steamer launched was of 1,005 tons. The prospects for the current year are reported bright, and with the advent of a large floating dock at Poca Quay, it is expected that larger vessels will come to Aberdeen to be repaired, which will prove an impetus to the shipbuilding industry.

Aberdeen still continues to be the largest center for the manufacture of horn combs, but the manufacturers report that although the

overturn was slightly better last year than for 1910, high tariffs have had the effect of reducing profits.

Trade in Paper and Timber.

The paper industry experienced a good year. Competition was keen, with the result that prices were cut to the lowest figure and profits were not as might have been desired. Raw materials, including coal, advanced in price, but increased competition prevented the sale of the manufactured articles at corresponding advances.

The demand for the usual classes of foreign wood remained fairly steady. There was a large demand for pulp wood, and the imports from Archangel were the heaviest on record. A gratifying feature in the trade was the distinct revival in the shipbuilding industry, which caused an increased demand for timber. The home timber trade remained firm. Large areas of woodland were depleted, and, owing to the high prices ruling for home-grown timber, this tendency is likely to continue.

Boot and Shoe and Motor-Body Industries.

The boot and shoe industry at the beginning of 1911 was depressed, but later on a revival took place. In common with other industries boot and shoe manufacturers had to pay considerably higher prices for raw materials. A noticeable feature of the year was the exceptional demand for patent-leather goods and the continued decline in the wear of tan leather.

Coach building has given place to motor-body building. A large number of motor-car bodies are now manufactured in the city for motor-car manufacturers in other towns, and this trade shows signs of expansion. There was a strong upward tendency in the motor-car trade in 1911, and the motor-body builders were kept busy.

Building Operations—Exports to United States.

There was little improvement in the building trade during last year. The total value of the building permits during 1911 was \$728,908, compared with \$487,793 in 1910, the increase being due to the erection of a new freight station by the Caledonian Railway. The tendency recently has been to erect dwelling houses of the cottage type, costing about \$2,500.

The following table shows the items and their values invoiced at the Aberdeen agency for the United States during 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Combs, horn.....	\$26,077	\$21,290	Linens.....	\$27,390	\$22,631
Enamel.....	3,985	3,278	Paper.....	6,199	6,243
Fertilizer.....	7,064	8,256	Whisky.....	22,065	21,614
Fish.....	591,259	590,023	Woolen goods.....	47,425	57,791
Fishing flies.....	2,689	3,733	All other articles.....	14,754	11,409
Granite.....	165,112	133,365			
Horn meal.....	5,943	25,893			
Iron sand.....	13,549	12,525	Total.....	934,150	924,111

The value of the shipments to the American insular possessions during last year was as follows: To the Philippine Islands, \$415, comprising whisky and horn combs, and to Porto Rico, \$164, made up of dried fish.

DUNFERMLINE.

[By Consul H. D. Van Sant.]

The imports into the consular district of Dunfermline from the United States during 1911 increased in value compared with the previous year. Some of the old line of imports have been supplanted by improved mining tools, concrete machines, hardware, etc.

There are no customhouses in Dunfermline; therefore the only way of ascertaining the value of American goods entering this market is through local shopkeepers, and the total imports of American goods are estimated at \$25,000 to \$50,000 annually. The building of the Rosyth naval base was responsible for the increase in the imports during 1911.

Dunfermline's and, in fact, nearly all of Scotland's American purchases are directed from London, Glasgow, and Edinburgh. The territory covered is relatively small in area and easily reached from Glasgow or Edinburgh, while the cost of direct or separate imports into each inland town or village would be more costly; therefore shipments are made in bulk usually through the leading seaports.

Displaying of American Goods.

During last year several new shops were opened in Dunfermline, displaying an increasing proportion of American products. In a well-arranged window a full-sized "silver steel" saw made in Indianapolis was displayed, marked 15 shillings (\$3.65). Side by side with this American saw were English makes selling for 6 to 8 shillings (\$1.46 to \$1.95) each. Because of superior finish, quality, and workmanship, as stated by the shopkeeper, the American saw, at a higher price, is selling well and is establishing a reputation never before attained in this district.

An American line of gas stoves was introduced, selling at 15 shillings (\$3.65). One of the dealers stated that a considerable number of these portable stoves were sold during last year and that the American gas stove is preferred over other competitive makes, because of cost, utility, and novelty.

In a boot shop investigated, colonial rubbers from Boston were meeting with a surprisingly large sale, considering that the rubber-shoe market had been heretofore controlled largely by other than American makes.

There is oftentimes a better opening for the sale of American goods to new firms than to the old establishments which are generally well stocked in old lines, because success, custom, and natural preference to home manufacturing interests do not readily change. Yet after they recognize the superiority of an article, as evinced by the sales of the new competitor, they are not slow to introduce the same goods themselves. New shop openings should be reported to the American trade when practicable.

Coal Industry—Rosyth Naval Base.

Up to July the prospects in the coal trade of Fife in this district were gloomy, but since then there has been a steady advance, and during the fall it was difficult to fill orders. The price of first-quality coal was advanced 1 shilling (24 cents) per ton toward the end of 1911, and 6 pence (12 cents) per ton for second-quality coal at wholesale. Retail coal was sold to the house trade in Dunfermline at 14s. to £1 (\$3.40

to \$4.86) per ton. The total shipments of coal from Burnt Island amounted to 2,430,708 gross tons, an increase of 302,490 tons over 1910 and 236,000 tons over any previous year. The coal trade of this district has increased in export nearly 1,500,000 tons during the last 10 years. Most of the shipments are made to European countries. The latest statistics show that 28,344 persons are employed in and about the Fife coal mines.

The act to extend the city's boundaries so as to include the vacant land between the present limits to the Rosyth naval base and the Firth of Forth went into effect May 15, 1911. The new area will likely be taken up with the homes of the families of the officers and men of the British fleet to be stationed at Rosyth as well as the large number of men to be employed at the works.

The Rosyth naval base construction is the most important work progressing in this district or in this part of Scotland. It is situated about 5 miles south of Dunfermline. Much progress has been made on this work during the past year. The contractors say they are ahead of the contract time for completion in September, 1916, and unless unforeseen obstacles are met with they will earn a considerable bonus, amounting to about \$35,000 per week. The number of men employed at the works is about 2,500. There is to be an expensive electric power station installed in the building just begun, and a \$500,000 sewage plant is to be built on the vacant space between Dunfermline and the works. American concrete mixers and drilling and other machinery and supplies have been used in this work.

Exports to United States.

Linen forms the chief article of export through the American consulate at Dunfermline to the United States. During the past two years there has been a decrease in the American purchases, due perhaps to the increased production in the United States and the keener German competition. German linens are now being offered in the Dunfermline market in direct competition with the local output. The looms were mostly employed during the year, and it is estimated that the general volume of business was about 7 per cent short of the preceding year.

The total value of the exports to the United States was \$2,292,896, against \$2,504,836 in 1910. The articles for the two years were as follows:

Articles.	1910	1911	Articles.	1910	1911
Cottons.....	\$75,804	\$82,759	Linoleum, floorcloth, etc..	\$477,315	\$425,888
Furniture.....	19,640	7,957	Scotch tweeds.....	6,041	5,912
Golf-iron heads.....	1,553	4,684	Unions.....	8,614	8,305
Jute:			Yarns.....	37,460	12,346
Paddings (burlaps)....	8,829	6,005	All other articles.....	4,773	3,351
Raw.....	826	2,230			
Linens.....	1,863,991	1,732,449	Total.....	2,504,836	2,292,896

EDINBURGH.

[By Consul Rufus Fleming.]

General business conditions in this Scotch district for any period are fairly well indicated by the experience of the banks. The average bank rate in 1911 was approximately 3½ per cent, as compared with 3¾ per cent in 1910, the average charge on bills up to two months

date being 4 per cent, as against $4\frac{1}{2}$ per cent, and the average rate of interest allowed on deposits was slightly less than 2 per cent, compared with $2\frac{1}{2}$ per cent.

While the banks were not able to loan funds quite as profitably as in 1910, their earnings were on a somewhat higher scale, on account of the increased activity in the demand for accommodation on the part of industrial and commercial enterprises, especially the ship-building, iron and steel, and woollen industries, and the shipping trade. The expansion in the net profits of the leading Scotch banks amounted to about $2\frac{1}{2}$ per cent. Depression in several classes of securities, however, proved a considerable drain on profits, as in 1910.

Number and Capital of Joint-Stock Companies.

The prosperity of some branches of industry and of commerce did not have any appreciable effect on the stock exchange markets. The year was a normal one in respect to the flotation of joint-stock companies in Scotland. The number of such companies registered—shipping, fishing, mining, manufacturing, financial, etc.—was 359, with an aggregate capital of \$30,423,840, as compared with 367, having an aggregate capital of \$33,011,660, in the preceding year. Of the companies registered last year, 283 with a total capital of \$19,606,350 were private companies, i. e., each having a membership of 50 persons, exclusive of employees, and the shares of which are not offered to the public. The conversion of firms into private joint stock companies has little significance, favorable or unfavorable, as to the state of trade or industry. In many cases it is merely a convenient arrangement whereby the heads of concerns transfer to others the whole or a share of responsibility of management.

Prosperity in the Woollen Industry.

Exceptional prosperity was experienced during last year, by the woollen manufacturers in this district where for some years the woollen industry has been active. All the spinning mills worked day and night, and the weaving mills found much difficulty in fulfilling contracts on time. The fashion at home and abroad ran distinctly in favor of cheviot cloths. Several south Scotland firms confined their attention solely to cheviots. The phenomenal demand for this make of goods was aided by the high prices of saxony wools and worsteds. Weave played little part in the creations of the designers; in coloring, however, many varieties were displayed, mixtures of every hue being conspicuous. Solid colors were not quite so abundant. This condition handicapped the scanty equipment of Scotch spinners, because mixtures can not be rushed through at the same speed that solid colors can.

It is thought that if these prosperous conditions in the Scotch woollen industry continue manufacturers must increase their spinning plants, the present 300 sets of machines being insufficient to supply over 3,000 looms. While the yarn-making plants are for the most part old, the weaving plants are up to date.

As an indication of the pressure of orders upon the cloth mills, some manufacturers raised their prices, in a few instances as much as 4 cents per yard, to keep down the demand and so far as possible to avoid the necessity for increasing their plants. The motor-car trade was last year more than ever a factor favorable to Scotch tweeds. Several firms made overcoat cloths weighing 3 pounds to the yard.

Markets for Scotch Woolens—Hosiery Trade.

The principal market for Scotch woolens is the United Kingdom. Of foreign markets, Germany is the best, while Canada, Australia, and South Africa are important markets. Buenos Aires has become the center of a considerable trade with South America.

Hosiery manufacture, which includes vests, ladies' caps, scarfs, long coats, men's jackets, underwear, etc., was another successful department of the woolen business last year. In Hawick, the largest hosiery town in the district, with 17 mills, the trade was steady and profitable throughout the year, some of the leading firms working overtime to cope with orders. The foreign demand, especially from France, Canada, and South America, was notably strong.

It is estimated that the aggregate value (at manufacturers' selling prices) of woolen goods produced in the district in 1911—cloths, hosiery, yarns, and blankets—was about \$21,000,000, an increase of 15 per cent over 1910, which was a record year in the Scotch woolen trade.

Mineral Oils and Their Products—Output of Distilleries.

The shale-oil industry, carried on by five companies, was again affected by the competition of foreign petroleum, which forced a reduction in the prices of burning oil and paraffin wax. The market for lubricating and gas oils and shale spirit was fairly steady through the year. Sulphate of ammonia, a valuable product of the Scotch oil companies, advanced in price about \$5 per ton; but much of the additional revenue from this source was absorbed by the increased costs of oils to be sold on a falling market. A large proportion of the 55,000 tons of sulphate of ammonia produced annually in Scotland goes to the United States and Hawaii to fertilize sugar plantations. Japan also is an important buyer. At the close of the year the market was firm at \$69 per ton.

The few distilleries in the district make grain whisky, principally by the patent-still process, the materials used being maize with 15 to 20 per cent of barley malt added. The production in 1911 was about normal—5,500,000 proof gallons—which is a small proportion of the total production of whisky in Scotland. Toward the end of the year the price of grain whisky advanced 2 cents per gallon, owing chiefly to a deficiency of maize. At the same time there was an enhanced demand from the blenders to supply an increasing consumption, and the entire trade was more active than it had been at any period in the preceding 10 years.

Although the home and foreign trade in ale and beer was above that of 1910, the domestic consumption was far below that of six years ago and the output unsatisfactory, being estimated at 1,100,000 barrels of 36 gallons each of beer and ale.

Paper and India-Rubber Industries—Coal Mining.

The 23 local paper mills, all of which make high qualities of writing and printing paper, had a fairly profitable trade, prices being well maintained throughout the year and the prices of materials—esparto, rags, and wood pulp—ruling lower than in 1910. The value of the output is given by experts in the trade as approximately \$11,500,000.

The india-rubber industry, which for a long period produced an annual average of \$5,000,000 worth of waterproofed clothing, boots

and shoes, tires, etc., was greatly depressed last year, especially in the footwear department.

With an increased productive capacity, the collieries of the district had a diminished output, as compared with 1910, due apparently to inadequate railway facilities, making delivery slow and expensive. The leading coal-mining companies propose to build and operate two lines of railroad between the coal fields and the port of Leith.

Shipbuilding and Structural Steel Works—Crops.

The shipyards on the Firth of Forth increased their output by 2,000 tons over 1910. These yards turn out yachts and other small vessels. The structural-steel firms had a busy and profitable year, in consequence of an increased demand for steelwork in nearly all parts of the country.

Farmers were generally prosperous. Wheat was above the average for the previous 10 years in both quantity and quality. Oats and hay were of exceptionally fine quality, but the yield was somewhat short; prices were satisfactory. There was a large yield of potatoes, and the growers were greatly benefited by the American demand.

Increased Trade with the United States—Motor Cars.

The east Scotland shipowners report better conditions in the shipping trade during 1911 than for some years past, especially during the last three months of the year. In the trade with the United States the earnings of vessels increased markedly, the principal outgoing cargo being sulphate of ammonia and potatoes, and the incoming cargo consisting mainly of grain, timber, provisions, feed stuffs, and general merchandise. In most lines of American manufactures and products there was a gain in the imports compared with 1910, a notable exception being in footwear, both leather and rubber.

In motor cars, two dealers stated that they had trebled their sales of American cars. One special recommendation of American cars, stated one dealer, was that even the cheapest of them have silent running gears—usually quieter on the lower speeds than a high grade British car—due probably to better material and construction. There was an extraordinary demand for durable cars selling at low prices—\$800 to \$1,200—and also for several types of American motor cycles. The American invasion in motor vehicles is not regarded as a temporary but as a permanent factor in the trade, which will probably develop rapidly and force a reduction of the entire market to a new basis of values, and the Scotch makers and dealers see the near approach of the end of the period of high prices and great manufacturing profits. As a result of the increased popularity of American cars in this country, sales of all kinds of motor accessories were far in excess of those for 1910, except in speedometers and lamps, which have been in strong demand for several years.

Men's Furnishings and Branded Goods.

A general improvement is reported by prominent houses in the sales of American men's furnishings, including scarfs, shirts, collars, suspenders, garters, and ready-made clothing. The business of one Edinburgh retail firm in these lines increased \$4,000, as compared with 1910. Some smaller houses find fault with branded goods. One dealer stated that "a business that sells branded goods lacks indi-

viduality, and it is only the possession of this quality that will save the smaller merchant from extinction. A customer for branded goods knows he can get exactly the same articles at the same prices at any other place. As to cheap goods, this objection may not apply, but to a 'connection' business, serving the better class of customers, it is fatal." The average retailer's objection to goods bearing trade names or the makers' names is much stronger in this country than in the United States, because even the small firms here in some lines advertise themselves as "makers" as well as merchants, and thus obtain a reputation which promotes their business. English and German manufacturers produce goods for this class of retailers, marked to order, or having no brand.

Trade in Musical Instruments and Household Goods.

There was an increased trade in the American player mechanism introduced into British-made pianos. For American pianos and player pianos of the highest class the demand was steady. The organ trade also improved somewhat, and the sale of American harps was much above the average of the last five years.

The trade in American household articles more than held its own last year, especially kitchen utensils and furnishings, elastic extension and multiple unit bookcases, carpet sweepers, heaters, etc. American carpet sweepers have long held the premier position in public favor, due primarily to the fact that they have not been successfully copied by foreign manufacturers, and also, in the opinion of a prominent dealer, to "enterprising methods of distribution, a persistent and steady publicity being afforded them by continuous advertising in the daily press and among retailers." Smokeless oil heaters found a ready market, the quality being excellent and the prices somewhat lower than the same grade of British make. Cotton house gloves increased in demand.

Tin and Brass Goods, Wooden Ware, and Timepieces.

A leading retail dealer stated that American tin, japanned, and enameled ware appear to have lost their hold on the Edinburgh market, because importing firms do not appear to be able to handle this class of goods at a profit. American brass goods were at one time sold on this market, but practically all of the common products of brass and tinned sheets are now supplied by Germany and England, Germany having the advantage in every article in which low labor cost is the controlling factor.

Sales of American ash and hickory handles were satisfactory; also of beehives and fittings. There should be a greater advance in the sales of American wooden goods.

The trade in American low priced grades of watches increased considerably. Of other grades the sales were about the average. There was a decreased demand for cheaper clocks, in favor of the better qualities. Sales of clocks have always been of little importance in this market, compared with the trade in watches.

Sales of Canned and Dried Goods.

The trade in American canned and potted meats was much curtailed on account of the high prices ruling. Six-pound cans of corned beef, an important article with grocery and provision dealers

here, were supplied by Australia and Argentina to a greater extent than ever before. Beef from these countries was 15 to 20 per cent cheaper than the American product.

Canned apricots, pears, peaches, and tomatoes, though prices ruled high, showed no falling off. Apples were in stronger demand than in 1910. There were increased sales of dried fruit—prunes, apricots, pears, and peaches. In California and Oregon prunes the increase was large in consequence of the unusually short crop of French plums. Higher prices of apples affected sales somewhat. There was an increased sale of canned sweet corn, which some dealers regard as an indication that this article, which has seemed to be unsuited to the Scotch palate, will gradually come into general favor.

Increased Receipts of American Apples, Meats, and Flour.

On account of the large American crop, the trade in barreled apples in 1911 was the heaviest for many years. There was a marked improvement in the packing and also in the grading, and Scotch wholesalers are hoping that a system of grading will be adopted by American packers on the Canadian basis, which would relieve the trade of much of the uncertainty that now affects all transactions in American barreled fruit. Boxed apples were in high favor, and, as a rule, reached the market in fine condition. The prospects for developing the apple trade are promising. There was a large increase in the sales of pears, particularly for cooking purposes.

Wholesale firms report an increase of 20 per cent in the sales of American hams as compared with 1910, due to somewhat lower prices; also an increase of 20 per cent in the sales of lard. For lard substitute, i. e., a compound of cottonseed oil and refined beef fat, the demand was strong throughout the year. The trade in flour during the greater part of 1911 was rather dull, but with the new crop trade conditions improved, more particularly in special grades milled in Kansas and Nebraska, which came in at moderate prices and gave fair satisfaction. Northwestern flour was much dearer than Manitoban of corresponding grade, and soft winter flour was undersold by the product of British mills.

Imports of cheese from the United States were exceptionally light, owing to the American demand, and Canadian and home products were substituted.

Imports of American Toilet Goods, Stationery, and Toys.

There was a marked increase in the imports of American toilet goods—soaps, tooth pastes, powders, tablets, and various specialties—due to their superior quality and also to constant advertising. Some classes of American goods handled by chemists have become staple articles in the trade.

The trade in stationery, consisting of pens, paper clips, and certain kinds of paper, was normal, but there was a decrease in the imports of American pencils, probably due to the fact that one of the American pencil companies has a factory in England.

American toys, especially for the holiday trade, sold freely and yielded fair profits to the leading dealers. But German makes of new devices and of staple goods were more largely in the market, and at lower prices obtained the bulk of the trade.

Sales of Dental, Optical, and Surgical Goods.

Dealers report a moderate business in American dental engines and instruments. There were also fair sales of compressors, atomizers, tubing, wax, cavity lining, impress rubber, abscess cure, etc.

Sales of optical goods, such as gold-filled spectacles and eyeglasses, increased. The demand for American nickel-plated and solid nickel frames and also for plain steel frames was steady. There was only a moderate call for field glasses and microscopes. These goods are all obtained by the local dealers through wholesale houses in London or Birmingham.

The trade in American surgical instruments was practically the same as in 1910. There was a greatly increased demand for a "never-slip" glove, used by surgeons and, to a less extent, by dentists, and the trade suffered somewhat owing to the delay in delivery of orders. There was a steady call for various other appliances supplied to the retailers through London wholesale agents.

American Sporting Goods on the Market—Hardware, etc.

An average business was done in American sporting goods, such as boxing gloves, punching bags, ice skates, air guns, elastic knee and ankle bandages, tennis goods, and tents and other camping equipment. Roller skates had a greatly diminished sale on account of the general decline of "rinking" in this country.

Sales of galvanized fencing and barbed wire increased considerably. American lawn mowers maintained their leading position against the strong competition of British made machines, which have been improved during the last few years. There was the normal trade in saddlers' hardware and also in food choppers and other special articles. Fair sales of American builders' hardware—locks, keys, hinges, etc.—are reported. Owing to long depression in the building trades in this district, the demand for materials, etc., has been light for several years.

A large retail firm stated that there is a strong German competition in east Scotland with the sale of American and English malleable cast fittings, steam jointing, springs, bolts and nuts, gun metal valves, gas and electric light equipment, and various other machine fittings and engineers' supplies, and that the Germans have something to offer at a much lower price than the American and English make; that although the firm preferred to handle the American goods of excellent material and of fine finish, a large number of customers preferred the cheaper priced articles.

Popularity of American Printing Machinery, Marine Engines, etc.

There was no marked change in the demand for various machines for the printing trade, which is an important industry in Edinburgh. A large number of American presses, binders, stitchers, etc., are in use here, and any new American labor-saving device is promptly added to the equipment of the large printing establishments. The sales last year consisted of standard machines for enlarged plants.

There were also sales of shoemaking machines. Power and hand pumps had a fair sale, and there was a greatly increased inquiry for American marine engines, which, according to a prominent dealer, are in high favor on account of their excellence and comparatively low cost. This dealer informs the writer that American prices in

this line "can not be met by competitors," and that if the foreign trade is well managed, there is no reason why it should not grow to large dimensions. In electric power machinery the American electric companies having manufacturing plants in the United Kingdom had a satisfactory business last year, due mainly to the extended use of electricity in mining; but so far as can be ascertained, electric coal cutting machinery, etc., manufactured in the United States did not come into this market, in which the competition of British companies is extremely keen.

Competition in Sales of Agricultural Machinery—Office Supplies.

There was an average demand for American agricultural machinery, such as binders, mowers, chilled plows, and cultivators. Profits were much narrowed by the sharp competition of British manufacturers. The prices of English binders were somewhat lower than for the American make, and as the English makers sell directly to farmers, only the superiority of the leading American machines enabled dealers to hold their usual share of the trade. In horserakes, cultivators, and plows the business was well maintained, considering the restricted market. Any expansion of the agricultural implement trade in this country must be slow, for it can only be brought about by the gradual breaking up of great estates.

The sales of American roll-top desks were normal during last year, but the trade in card index cabinets, filing cases, etc., increased.

A leading firm in these lines says: "There is, in our opinion, a good market for many other American office appliances, if the manufacturers had distributing agents in important trade centers on this side." Most of the articles in this line are sold through agents in London.

American and British Shoes on the Market.

The local retail boot and shoe stores of American manufacturers had a fairly satisfactory business last year in leather footwear, but the volume of trade in the district was far below that of the preceding two or three years. The decrease was due almost wholly to the fact that British boots of American shapes, made on American lasts, are put on the market. A prominent wholesaler said: "I do not stock American made boots any longer, as the British makers have now come up to a high standard of manufacture." Another leading wholesale firm said: "We used to import a fairly good quantity of ladies' boots and shoes, but during 1910 and 1911 home productions met our requirements, and we discontinued our purchases from the United States. We had no fault to find with the American goods." Two other important wholesalers who were interviewed made similar statements. With the same machinery and much cheaper labor, British boot manufacturers are making this market of doubtful value to American competitors except in special lines. Owing chiefly to mild winters and fine weather conditions generally during the last two years, the demand for American rubber shoes has fallen off.

Exports to United States and Insular Possessions.

The value of the merchandise invoiced through the Edinburgh consulate for the United States during last year was \$1,352,825, an increase of \$68,539 compared with 1910. The items showing the

greatest gains were potatoes and whisky. The following were the articles and their value for 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Ale.....	\$12,984	\$13,027	Paper.....	\$8,523	\$6,289
Books (printed sheets, etc.).....	122,441	92,043	Paper stock.....	22,530	22,648
Cards (picture post cards).....	22,479	18,974	Pictures and frames.....	4,336	6,589
Fertilizer (sulphate of ammonia).....	74,909	65,784	Plates, stereotype.....	3,731	3,612
Furniture.....	25,085	21,831	Potatoes.....	3,225	80,142
Fusel oil.....	21,018	18,823	Printers' blankets.....		3,604
Gelatin.....	19,229	26,255	Rubber-proofed goods.....		1,914
Glassware.....	860	2,020	Sailcloth and tarpaulin canvas.....	1,285	4,346
Grindstones (Craigleith stones, etc.).....	11,773	5,886	Seeds.....	17,626	34,396
Hair, goats'.....	2,770	3,972	Tobacco.....	2,637	2,511
Herring (cured).....	23,019	34,606	Whisky.....	376,123	418,330
Machinery.....	12,085	1,426	Wines.....	35,192	55,006
Maps.....	11,136	8,396	Wire and wire rods (steel).....	92,952	84,257
Medicines and drugs (chiefly opium alkaloids).....	18,605	15,414	Wool.....	126,540	95,108
Oil, cottonseed.....	16,287		Woolen and worsted goods.....	173,911	187,387
			All other articles.....	22,995	15,737
			Total.....	1,284,286	1,352,825

Hawaii is the principal American dependency in the shipments from this district, and there was a large gain in the total exports to that island last year due to increased shipments of fertilizers (sulphate of ammonia). The total value of the exports to Hawaii was \$331,672 against \$212,197 for 1910, and the principal items were: Fertilizer \$292,454, whisky \$9,222, iron and steel \$5,329, fire bricks \$1,613, and hardware \$1,294. The exports to the Philippines amounted to \$14,899, of which whisky represented \$12,678, and to Porto Rico \$3,135, made up of woolen and worsted goods and whisky.

The returned American goods were valued at \$11,817, of which \$9,976 represented furniture.

Trade of Leith.

The total number of vessels entering the port of Leith during last year was 7,366, with a tonnage aggregating 2,530,000. The following table shows the principal imports into and exports out of the port for 1910 and 1911, in long tons:

Items.	1911	1910	Items.	1911	1910
IMPORTS.			EXPORTS.		
Grain.....	Tons. 368,753	Tons. 317,301	Coal (cargo).....	Tons. 1,608,831	Tons. 1,708,318
Flour, etc.....	65,728	58,677	Coal (bunker).....	316,274	355,507
Sugar.....	142,158	104,865	Pig iron.....	25,318	22,947
Esparto.....	4,757	2,507	Ales.....	75,387	74,851
Wood.....	88,752	91,157	Sulphate of ammonia.....	55,945	60,844
Fertilizer.....	62,980	59,386			

[From the London Times.]

Water Power in Scotland.

According to a paper contributed to the Inverness Scientific Society, Scotland is estimated to possess 1,000,000 horsepower from water, and it is pointed out that even if the figure be halved it would still represent, on a 10-hour working day basis throughout the year, an amount of power equal to that obtained from three and one-half million tons of coal. On a plan accompanying the paper are marked over 40 localities where water power is believed to be available in amounts ranging from 400 up to 20,000 horsepower, and the list does not claim to be complete. The calculations have been made on the assumption that the rainfall amounts to 42 inches a year, and that two-thirds of this amount is available for power; and in order to guard against

overstatement 25 per cent of the theoretical calculated amounts has been deducted. In regard to Inverness it is pointed out that if the rainfall in the 700 square miles that drain into the River Ness were retained in Loch Ness by controlling the overflow into the river, it would be possible by employing the Caledonian Canal as a flume or conduit to convey the stored water to the town and utilize it there for the development of 3,000 horsepower during the working days of the year, while yet supplying sufficient water to the river to maintain the normal summer flow. Another attractive drainage area for power purposes is that of Loch Luichart, having an area of 149 square miles. The river flows out of the loch in a series of cascades, and falls 125 feet in 850 yards. On a 75 per cent efficiency, and dealing with half of a 42-inch rainfall as available for power, 1,580 horsepower, on a 24-hour power day, could be developed. This would be fully 3,000 horsepower per working day, and even if no water flowed into the loch for six months, a sufficient quantity of water could be stored to give this quantity of power for six months by raising the level of the loch 36 feet, and the water would all be returned to the river again within a half mile of the loch. The raising of the loch could be easily done, as the outlet is through a narrow rocky gorge. The power could be taken to Inverness by a high voltage transmission line. The cost of the necessary pipe lines, generating plant, buildings, and transmission line to Inverness, but excluding water rights and way leave, would probably amount to £40,000 (\$195,000). Even 1,000 horsepower used industrially would provide employment for 3,000 workers in Inverness, representing an increase in the population of probably 15,000 people, and with the fine facilities for shipping at its harbor and Thornbush Quay, and the abundance of open ground on both sides of the river mouth, suitable for factory sites, and readily accessible by railway, the town is in an eminent degree suitable and desirable for such an industrial development.

AMERICANS INVITED TO GERMAN EXPOSITIONS.

International Building Exposition at Leipzig.

With reference to the International Building Exhibition to be held next year at Leipzig, as announced in Daily Consular and Trade Reports for June 4 and March 20, the Department of State is in receipt of the following note of invitation from the German Ambassador at Washington:

The exposition, from the standpoint of finance and organization, must be considered as an important undertaking worthy of participation. The interest which His Majesty the King of Saxony has shown by assuming its patronage, the fact that it enjoys the utmost good will of the State and city authorities, as well as that of the leading professional men and corporations, and, lastly, the financial support promised by the city of Leipzig, jointly with the citizens, afford a guarantee that the exposition will be carried to a worthy and successful completion.

By direction of the Imperial Government I have the honor to bring the foregoing to Your Excellency's knowledge, and at the same time extend the invitation of the management of the exposition.

International Art Exhibit at Munich.

The German Ambassador has transmitted to the State Department copies of the regulations governing the Eleventh International Exposition of Art to be held in the Royal Crystal Palace of Munich from June 1 to October 31, 1913. The exposition is being organized by the Munich Federation of Artists, in conjunction with the Munich Secession, a society of the younger and more modern artists who seceded from the older organizations and who in this exposition, as in others of a similar nature, will have a separate section with its own jury and hanging committee. Works of art in the different branches—painting, sculpture, architecture, engraving—and works of art industry are admissible to the exposition, but the last mentioned can be admitted only by personal invitation of the central committee. First and second class gold prizes will be awarded. The German Ambassador expresses the hope that the United States will take part in the exposition by sending a collective exhibit and an official delegate.

BELGIAN HIDE-TRADE METHODS.

[From Consul General Henry W. Diederich, Antwerp.]

The Antwerp hide and skin market enjoys the reputation among the hide dealers of the world of being conducted on the very highest commercial principles. The unique conditions prevailing here are due to the efforts of a single firm, Grisar & Co., which does not handle hides but acts as official brokers between buyer and seller.

The great majority of hides imported at Antwerp are wet salted River Plate hides, which have in most cases been salted at the port of embarkation during loading. On discharge on the wharf at Antwerp the salt is carefully brushed from them, and I am given to understand that this method of freeing the hides from salt is far better than the mere shaking of the hides as practiced in London. After this process the hides are bundled and weighed and afterwards sorted according to weight into three classes and various subclasses. The supervision of this sorting is done by delegates of Grisar & Co., who see to it that any damaged hides which happen to be in the lot are put aside to be sold later on at a reduction. After the hides have been carted to the warehouse, the expert broker himself inspects all the hides, valuing them, and then entering their full description in a catalogue. This description is always absolutely accurate and fair to the buyers.

No Consignments Reserved—Auctions.

It is to be noted that the reputation of the Antwerp market is kept up by the fact that every hide that comes into the port is officially listed and open for sale as soon as it arrives. No merchant reserves any lots to favor a customer. The market is entirely open; and the fact that all the hides, from whatever source, are controlled by the official brokers, establishes such a confidence in the market that foreign buyers frequently purchase merely by catalogue without counterinspection or examination.

Sales are made either between buyer and seller direct or by the intervention of the official brokers, when Antwerp buyers or sellers only are concerned. When foreign buyers apply to the official brokers, they are referred by them to Antwerp dealers or commission houses.

Auction sales are held only when the market is overstocked.

UNIFICATION OF MANCHURIAN WEIGHTS AND MEASURES.

[From Consul Albert W. Pontius, Dalny.]

The Dairen (Dalny) Business Men's Association has submitted to Civil Administrator Aiga its opinion relative to the unification of the standards of Manchurian measures and weights, as follows:

1. Whereas the weights and measures now in use at Dairen are of both Japanese and Chinese make, and as the Chinese manufactures are more or less incorrect in the majority of cases, it is advisable to suspend their use altogether and to permit none but Japanese manufactures to be employed in all commercial dealings.

2. Such weights and measures as were made in Japan and are on sale at Dairen must, of course, have passed the formal inspection and been approved. It is desirable that they should be further subjected to the examination of the civil administration authorities.

3. As the measures and weights which have been approved are liable to derangement from one cause or another, they should be subjected to a periodical inspection once a year.

FOREIGN TARIFFS.**CUBA.**

[From the Cuban official treasury bulletin, May 15, 1912.]

Special Reductions in Rates of Duty.

The Cuban Government has authorized exemption from the surtax for a number of articles to be used for industrial purposes. Bristol board, fine cardboard, cardboard covered with fancy paper, etc., dutiable under tariff No. 162A, is henceforth subject to the following rates of duty: \$3.50 per 100 kilos, general rate, and \$2.45 per 100 kilos, preferential rate to the United States. Other cardboard, and cardboard covered with ordinary brown paper, dutiable under tariff No. 162B, is henceforth subject to the following rates of duty: \$1 per 100 kilos, general rate, and \$0.70 per 100 kilos, preferential rate to the United States. Machinery and apparatus imported by the Cuban Coal Co. (Compañía Carbonera de Cuba) and the Cuba Copper Co., under tariff No. 226, is to be dutiable at 20 per cent ad valorem, general rate, and 16 per cent ad valorem, preferential rate to the United States.

These exemptions from the surtax apply only when the articles specified are imported direct by those engaged in the industries specified in the decrees, for use in their own industrial establishments.

CANADA.

[From Consul General John G. Foster, Ottawa.]

Temporary Reduction on Cement and Bags.

By an order in council passed June 8, 1912, it was provided that from June 12 to October 31, inclusive, the Canadian import duty on cement and cement bags (tariff Nos. 290, 291) should be one-half the amounts specified in the tariff. [The general rate on cement is 12½ cents per 100 pounds, on cement bags 20 per cent ad valorem.]

NICARAGUA.

[From Consul James W. Johnson, Corinto.]

Distillation and Exportation of Brandy.

By a decree of April 10, 1912, the restrictions on the establishment of new brandy (aguardiente) distilleries, and on the exportation of brandy from Nicaragua, which had been in force since the end of 1910, are removed.

PORTUGAL.

[From Diário do Governo.]

Importation and Exportation of Olive Oil.

By a decree of April 24, 1912, the Portuguese Government reduced the rate of duty on olive oil from 150 reis to 80 reis per kilo (from about 15 cents to about 8 cents per 2.2046 pounds). This special reduced rate of duty is to remain in effect until the end of October, 1912.

The Government has also put in force a set of regulations regarding the exportation of Portuguese olive oil. [Copies of these decrees, in Portuguese, are on file in the Bureau of Manufactures.]

RUSSIA.

[From Board of Trade Journal, May 23, 1912.]

Rates on Agricultural Machinery and Parts.

On May 19, 1912, the Russian Government promulgated a measure reenacting the provisions which were in effect up to April 14, 1912; whereby agricultural machinery and parts were admitted free of duty or at specially reduced rates. These provisions had lapsed, owing to the failure of the Duma to adopt legislation on the matter prior to April 14. [See Daily Consular and Trade Reports for May 10, 1912.]

VENEZUELA.

[From Consul Thomas W. Voetter, La Guaira.]

Tariff Classifications.

The following articles, not specially mentioned in the customs tariff of Venezuela, have been classified by the customs authorities and are subject to the rates of duty set forth below:

White cotton tapes 3 centimeters wide, for use with printing presses, class 4, including surtaxes, 10.3 cents per pound.

Grape sugar and milk sugar, class 5, including surtaxes, 17 cents per pound.

Woven cords of cotton, flax, or hemp, 4 to 14 millimeters in diameter, class 4, including surtaxes, 10.3 cents per pound; same, less than 4 millimeters in diameter, class 5, including surtaxes, 17 cents per pound.

Catalogues free.

TASMANIAN TRADE NOTES.

[From Consul Henry D. Baker, Hobart.]

A State agricultural farm is to be established in Tasmania. Parliament having appropriated \$55,000 therefor.

Stud sheep exports.—A shipment of 117 stud merino ewes and 2 rams has left Hobart for Durban, South Africa, the largest consignment of stud sheep which has ever left this island. These sheep were specially selected by representatives of South African sheep breeders.

Tar spraying machine.—The city council of Hobart has imported from London a \$1,160 machine for spraying the streets with tar to prevent dust. It contains a furnace which heats the tar to boiling point and applies it under pressure generated by an air pump. It was found that the machine was too heavy to be drawn by horses and inquiry is being made for a small motor powerful enough for the purpose.

New woolen mill.—One early result of the cheap hydroelectrical power available in Hobart after January 1, 1913, will be a new woolen mill for making blankets, tweeds, etc. A 3½-acre site has been purchased. It is understood that it will be an offshoot of the Australian Woolen Mills Co., of Sydney. The Commonwealth of Australia may also erect a woolen mill at Hobart for making military uniforms, etc.

A night telegraph letter service was inaugurated by the British Post Office on June 1. The rate is 12 cents for 36 words and 1 cent for each additional word.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9006. Hotel furnishings and equipment.**—An American consul in a European country reports that a new hotel is being constructed in his district. It will contain 850 rooms, each with dressing rooms and bath. While all the materials used in the construction of the building will be of local origin, it is possible that American firms may secure orders for some of the hotel furnishings and equipment. Name of person to be addressed regarding this matter can be obtained from the Bureau of Manufactures.
- No. 9009. Vacuum pans and evaporators.**—A foreign business man has informed an American consulate that he desires to get in touch with American makers of vacuum pans and single and multiple evaporators for packing-house work.
- No. 9010. Tobacco and tobacco seed.**—A report from an American consul states that a manufacturer's agent in his district desires to establish connections with American exporters. Being an expert in tobacco, he is particularly interested in the leaf-tobacco trade and would appreciate correspondence from dealers in seed leaf and Virginias.
- No. 9011. Motor cars and accessories.**—The manager of a motor-car company in Australasia has informed an American consulate that his company would appreciate catalogues and price lists of American motor car and accessories manufactures. The firm is prepared to handle all kinds of cars, including electric truck wagons, and is open to accept agencies for Australasia. Correspondence is invited.
- No. 9012. Equipment for Pasteur institute.**—A foreign Government official is planning the establishment of a Pasteur institute as a memorial to a late member of his family. It is understood that a considerable sum will be devoted to this purpose. Proposals for equipment should be addressed to this official by interested American firms.
- No. 9013. "Efrosite."**—An American consular officer in France reports that a firm in his district desires to know the name of the American company selling a product called "efrosite," which is described as a variety of white clay, as it is anxious to import this product.
- No. 9014. Chaff cutter.**—The Bureau of Manufactures is in receipt of a communication from an American electrical engineering firm stating that one of its clients requires a chaff cutter suitable for driving by power, for which purpose it should be supplied with a stock-size pulley, keyed to the shaft, to drive by an electric motor and belt. The machine should be arranged so that the length of cut can be altered and be fitted with toothed rollers, steel face, and rising mouthpiece. It should be large enough to cut sufficient hay for 8 or 10 mules in one hour. It is advisable that it be fitted with a guard to prevent injury to the hands of the operator.
- No. 9015. Christmas goods and novelties.**—American manufacturers and exporters of holiday goods, such as toys and Christmas novelties of all descriptions, are requested by an American consul to forward catalogues and price lists of these lines to his office. If furnished, the catalogues should be forwarded at the earliest possible date in order that anyone wishing to order from them may be able to procure goods in sufficient time for the Christmas trade.
- No. 9016. Tin and terne plate.**—An American consul reports that there is a demand in his district for American tin and terne plate, the market at present being supplied largely by British houses. One of the largest local plants for the manufacture of tin and terne plate boxes and cases is very desirous of corresponding with American exporting concerns willing to supply this demand at reasonable prices. This concern states that it purchases 6,000 to 7,000 cases of tin and terne plate every year and would be pleased to buy from the United States instead of Great Britain if terms are favorable.
- No. 9017. Horn refuse.**—A manufacturer of fertilizer in Germany desires to buy horn refuse (hornabfallen). He requests an American consulate to secure offers of large amounts with prices. Correspondence in German is preferred.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the officers named.]

- No. 688. Willows.**—Sealed proposals for furnishing willows at South and Southwest Passes, Mississippi River, will be received at the United States Engineer Office, Room 325, Customhouse, New Orleans, La., until June 20. Information on application to Lansing H. Beach, Lieutenant Colonel, Engineers.
- No. 689. Brick building.**—Sealed proposals will be received at the Indian Office, Washington, D. C., until July 17, 1912, for furnishing materials and labor for the construction of an addition to brick school building at the Salem Indian School, Oreg., in strict accordance with the plans, specifications, and instructions to bidders, which may be examined at the Indian Office; the office of the Supervisor of Construction, Denver, Colo.; the Oregonian, Portland, Oreg.; the Capital Journal, Salem, Oreg.; the American Contractor, Chicago, Ill.; the United States Indian warehouses at Chicago, Ill., St. Louis, Mo., and San Francisco, Cal.; the Builders and Traders' Exchanges, Minneapolis, Minn., and Omaha, Nebr.; and at the school. For further information apply to the Superintendent of the Salem Indian School, Chemawa, Oreg.
- No. 690. Plumbing system at post office.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until June 24 for a new plumbing system at the United States post office, Rock Hill, S. C., in accordance with the specification and drawing, which may be obtained from the custodian at Rock Hill or at the office of the Supervising Architect.
- No. 691. Ice-making and refrigerating plant.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until July 13, 1912, for a steam-driven ice-making and refrigerating plant, complete with all accessories, and with superintendence for its installation, at the naval station, Guantanamo, Cuba. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named.
- No. 692. Electric-elevator plant.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until June 24, 1912, for the installation complete of a new electric-elevator plant in the United States courthouse and post office, Pittsburgh, Pa., in accordance with drawings and specifications, copies of which may be had at the office of custodian, Pittsburgh, or of the Supervising Architect.
- No. 693. Medical supplies.**—Sealed proposals, in duplicate, will be received at the Field Medical Supply Depot, United States Army, 21 M Street NE., Washington, D. C., until June 27, 1912, for medical supplies, including the following: Aspirin, cocaine hydrochloridum, digitalinum, iodum, medical chests, alcohol stoves, buckets, galvanized iron buckets, hand washbasins, gray enameled dippers, lanterns, litter slings, hospital-corps pouches, canvas cases for bedding, cotton pillowcases, cotton sheets, pocket cases, hypodermic syringes, Hodgen's splints, bottles, rubber stoppers, tins, lantern globes, etc. Specifications and particulars can be obtained from Maj. C. R. Darnall, Medical Corps, in charge of depot.
- No. 694. Traveling cranes.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until July 6, 1912, for 4 electrically and 18 hand-operated traveling cranes for the naval station, Pearl Harbor, Hawaii. Plans and specifications can be obtained on application to the bureau or to the commandant of the naval station named.
- No. 695. Oil-burning plant for heating boiler.**—Sealed proposals will be received by the Supervising Architect until July 15 for an oil-burning plant for heating boiler in the United States post office at Fresno, Cal. Specifications can be had of custodian at Fresno or of the Supervising Architect.
- No. 696. Medical supplies.**—Sealed proposals will be received at the Medical Supply Depot, 543 Greenwich Street, New York, N. Y., until June 17 for certain medical supplies, including ether, adhesive plaster, etc. Specifications can be obtained by writing the officer in charge of the depot.

NEW WEST INDIAN CULTURE BANK.

[From Consul General S. Listoe, Rotterdam.]

An enterprise which will materially contribute to prosperity in the Dutch West Indies will soon be realized in the establishment of a "culture bank" for said colonies, the matter having been under consideration at different times in recent years.

Cooperation was first sought with the West Indian interests represented in various colonial enterprises at Amsterdam, but the fact that the proposed bank would conduct its business mainly with the West Indian plantation owners, did not interest the Amsterdam parties. It has now been arranged that the new bank will be controlled by Rotterdam interests—with the exception of one Amsterdam firm—under the auspices of the Rotterdam Bank Society.

The new bank's principal object of becoming a credit institution for agricultural interests will be strictly maintained, and only secondarily will it give attention to business of a general credit bank. The capital will be \$600,000, divided into \$400,000 preferred and \$200,000 common stock; the former will be taken by a syndicate, of which the Rotterdam Bank Society is the leading factor.

After discussing the matter for some time with Government officials, it has been decided to submit a bill to the Legislative Chambers of the Netherlands, to the effect that the Treasury Department of this country will be authorized to subscribe for the common shares of the bank's capital, which shall guarantee an annual dividend of 5 per cent for a certain number of years on the preferred stock.

PLUMBING SUPPLIES FOR CHINA.

[From Consul General Samuel S. Knabenshue, Tientsin.]

Inquiry is made as to the possibilities of selling plumbing supplies in Tientsin, as well as in other Chinese cities. The market for such supplies is so far limited to Tientsin and Peking; and in these chiefly to the residences of foreigners, to the leading hotels, business houses, public offices, etc. The vast mass of Chinese structures have no plumbing at all. Peking and Tientsin are the only cities of North China which have waterworks. In the native city of Tientsin there are public hydrants at even distances along the streets, and the people carry their supplies from these in pails. The same is true of Peking. Few Chinese residences have plumbing arrangements as yet.

The above is not said in a spirit of discouragement, but rather to show how enormous the field will be for plumbing supplies when the business is properly pushed. What is needed is some American house to send out a man to act as a missionary in this business. There are houses here in Tientsin which import plumbing materials, but they keep hardly any stock on hand. I think that possibly there are on sale at present, in the foreign settlements of Tientsin, not over a half-dozen heaters for water for stationary bathtubs, etc. Anything more elaborate is ordered from Europe or from the United States.

The Montreal city council has approved the proposed construction of a \$649,000 annex to the City Hall.

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MOVING PICTURES ABROAD.

ENGLAND.

[From Vice Consul Rice K. Evans, Sheffield.]

Sheffield has 17 cinematograph theaters, whose total intake is about \$7,300 per week. It is estimated that they expend an average of \$1,460 a week in the rental of films.

Films are imported by the manufacturers' agents, located in London, by whom they are exhibited to managers of cinematograph houses. Some weeks before the release date they are bought by film-renting firms at an average price of 4d. (8 cents) per foot. These renting firms then offer them at auction to the playhouse managers at various prices per week rental. So keen has the competition in these auction sales become that the price of films has advanced 100 per cent within the last year or so, during which period the manufacturer's price has not risen at all. Houses of good financial standing pay quarterly for the films received; others pay on receipt of goods.

It is estimated that the life of a film is five to six weeks' running. Of course, they are run much longer, but they deteriorate with use. This, together with the keen competition for the newest goods, makes a difference of 20 per cent between the price for the first run and the second run; 15 between the second and third run; and so on down as the film is more used and becomes more generally known. It is said to be quite the usual thing for a film to go out on its seventh run at a rental of 50 per cent less than it brought on its first time out.

The Middleman's Profits—Subjects.

It is said that a film that goes out six times nets the middleman who bought it from the makers 100 to 150 per cent. Hence the managers would gladly do away with the middleman and rent direct from the agents.

More than 60 per cent of the films used in this city are American. Italian films come next, amounting to about 15 per cent; the French 10 per cent, and British-made films 6 or 7 per cent. The reason given

for the popularity of the American-made film is not that the photography is any better, but rather that the subject matter at present suits the popular taste. The American film generally portrays the so-called western drama, with stirring, forceful action, put on in the open. The French films tend more toward the comic, with close work, where facial expression and detail count. In the field of historical subjects in color the French makers easily excel. The Italian films have come on rapidly during the last year. In photography they are easily equal to the best, and in subject matter they are pioneering a new field, viz, weaving a minor plot about stirring historical events. They are also producing a class of very popular pictures dealing with actual events, where the action is rapid and exciting, as, for instance, swimming Italian cavalry horses.

The greatest advance, however, as far as the British market is concerned, has been made by the British manufacturers. Their photography has improved, and their subject matter is of the higher level which the cinematograph shows are approaching. In a broad way it may be said the English makers are tending toward the military drama, maneuvers, and street scenes, and are generally along a high plane in that they educate and enlighten.

Changing Demands of Moving-Picture Audiences.

Five years ago the popular film was the home drama, where the action was built on a purely fictitious plot. Roughly speaking, two years ago the American cowboy came on the stage and rapidly became the popular hero of the moving-picture palaces. His erstwhile favor is now somewhat on the wane, and, though no bill is complete without him, he is not to-day the popular idol that he was six months ago. More and more is there a demand for real people and real things. Managers confidently state that the day is coming when the tragedies of history as subject matter will supersede entirely the mythical battles of the cowboys and "bad men" of the western plains, and the moving-picture entertainments of the future will run more and more to the educational and instructive. To-day a manager considers a bill incomplete if it does not include at least one scientific film, such as a set of pictures dealing with bird or animal life, industrial or commercial welfare.

In many picture houses films entitled "The Happenings of the Week" are now shown. These features were at first rather undervalued, but their popularity has so grown that now no manager can afford to omit them. The subjects are the political, social, and other news events of the week just passed, and the moving-picture public has come to enjoy seeing their newspaper stories of yesterday enacted on the screen.

JAPAN.

[From Deputy Consul General F. R. Eldridge, jr., Yokohama.]

Moving pictures are very popular in Japan. Once established, the business has continued to increase, and each year has witnessed the expansion of the enterprise.

Up to the present time most of the machines in use in Japan have been imported, although recently the manufacture was inaugurated on a very small scale. The chief virtue of these domestic-made machines seems to be their cheapness. One company, the Japan Cinematograph Co., manufactures a machine complete for \$45. The

cost is distributed as follows: Main lantern, \$22.50; 3 to 5 inch lens, \$2.50; arc lamp, gas tank, and all other appliances, \$20.

That these machines are unsatisfactory is evidenced by their scarcity and the continued importation of foreign-made machines. Germany comes first as an exporter of cinematographs to Japan, followed by France, England, Italy, and the United States. The makes imported have been New Urban "P. P.," Pathé's Reliable, Gaumont's M. C. Chrono, and the Edison.

Criticism of American Machines—Film Imports.

In commenting upon the American machines, one large importer states:

So far as the exhibition of the pictures on the canvas is concerned, the American machines do just as well as any other make, but they have the defect of wearing out the films much more quickly. Being a great manufacturing nation, we are sure that the United States can produce just as good machines as any other country; and if they are made cheaply enough they can be sold in great numbers in this country, for we alone can take at least 60 of them a year.

Of the 83 moving-picture halls in Japan 42 are owned by Pathé & Co. The number of halls in operation is increasing almost 50 per cent a year, but how long this ratio will be maintained it is hard to predict. In addition to the regularly established halls there are numerous traveling companies which visit the halls in the country districts about once every six weeks, generally exhibiting two days in each place.

There are nearly 2,000,000 feet of moving-picture films imported into Japan every year. The imports of Pathé & Co. in 1910 were divided as follows: United States, 720,000 feet, both negative and positive, from the Eastman Co.; France, 72,000 feet, tinted and untinted; Italy, 60,000 feet, from Itara & Co., 36,000 feet of Ambrosio films, and 36,000 feet of Mirano films, all untinted; Great Britain, 36,000 feet, from Urban Trading Co. The Yokota Shokai, in addition to manufacturing 150,000 feet of Japanese films every year, imports 250,000 feet from American, French, and English manufacturers.

Subjects Favored—New Halls Being Opened.

The most popular kinds of pictures in Japan are pictures portraying: (1) Heroism, e. g., the story of a warrior fighting for righteousness; (2) pathos, e. g., the story of a son whose father has lost all his fortune and who strives hard, enduring many difficulties, to support and help his father; (3) magic; (4) comedy; (5) educational; (6) scenic. The kinds of films that are not welcomed in this country are: (1) Love affairs; (2) pictures of policemen or Government officers fooled or mocked by the people; (3) pictures which instill revolutionary ideas in the heart of the youth.

It seems to be the opinion here that American films are satisfactory as to quality of the film, but that the actors are inferior to those of other countries, especially as regards comedy and magic.

Numerous trade opportunities are being continually offered to this trade in Japan, and recently plans have been formed to utilize the foreign amusement hall in Yokohama as a cinematograph theater, leasing the films from a Manila agency. Japanese motion-picture halls are being opened in great numbers and all must be supplied with machines and films, and so far as the films are concerned a majority of these must be supplied from abroad.

CHINA.

[From Consul General Samuel S. Knabenshue, Tientsin.]

The moving-picture business is much more largely developed among the treaty ports in southern China—that is, from Shanghai southward—than it is in North China. In this consular district there is but one establishment using moving-picture films. This is the Arcade, located in the French concession, Tientsin. The entertainment here consists usually of the exposure of eight films during the evening, interspersed at times with turns from one or two variety actors. The house is a small one, the patronage not large, and the proprietors often omit the variety turns on account of the expense of bringing performers from the south. There was an amusement house of the same character in Peking, also called the Arcade, but it has been closed since last November.

The market for films and moving-picture machines is almost entirely in the hands of the Pathé-Phono-Cinema-Chine, whose head office is in Paris, with branches at Calcutta, Bombay, Hongkong, Tientsin, and Shanghai. This firm has a practical monopoly of the moving-picture business on the China coast and throughout the Far East generally. The Arcade here rents the films it uses regularly from this house. The films as a rule are sent from house to house along the China coast until they are worn out. Occasionally an American film is shown here, but it is always a secondhand one and is obtained from the above company.

Moving-picture shows are increasing in popular favor in South China, and the natives are evincing a great interest in them. So far this does not appear to be true of North China. However, there is no reason why a popular liking should not be built up among the Chinese if some firm would enter the business and provide traveling cinematograph shows to be exhibited in Chinese theaters in the various native cities of North China.

STRAITS SETTLEMENTS.

[From Vice Consul General D. Milton Figart, Singapore.]

The principal towns of the Malay Peninsula are Singapore, with a population of 325,000; Penang, 277,841; Malacca, 124,029; Kuala Lumpur, 46,567; Ipoh, 23,354; Taipeng, 18,000.

There are three moving-picture shows in operation in Singapore and about six throughout the remainder of the peninsula. The three in Singapore are Harima Hall, the Alhambra, and the Marlborough.

Pathé Frères supply both machines and films. The machines are from the English branch of this company, while the films are not only Pathé Frères, but various other makes. This company buys up from time to time films which it desires from other manufacturers and claims to have a monopoly of this market. It stocks about 3,280,000 feet of films and receives 3,000 to 5,000 feet of the new films each week. An operator has been in this district for some time, taking views of the principal industries and other interesting features, such as rubber cultivation, tin mining, crocodile hunting, manufacture of sago flour, etc. This operator also works in the surrounding country.

American Films—New Theater Ordinance.

As above stated, Pathé Frères claim to have a monopoly of the market, and will buy interesting films at their full value if necessary,

depending on the hiring out to the various shows for their profit. Many American films are shown at this time, especially those manufactured by the American Biograph Co.

A bill has been introduced into the Legislative Council amending the theater ordinance of 1908, which will provide for the examination by the chief police officer of every application for a license to carry on cinematograph exhibitions in the Straits Settlements. Such applications must be in writing and contain a description of every scene intended to be produced at such exhibition, and it is prohibited to advertise or produce any scene the description of which has not first been furnished to the chief police officer.

TURKEY.

[From Vice Consul I. Montesanto, Trebizond.]

Trebizond has one fine theater for moving pictures, built for the purpose by the Trebizond Cinematographic Co. It occupies a corner lot adjoining the public garden and fronts on Liberty Square, the most central part of the city. The company has spent \$7,500 for the erection of this theater and \$5,300 for the two oil engines and the necessary electric accessories. The 9-horsepower, 2-cylinder group electric motor is from Aster, of Paris, the 12-horsepower transmission motor from Auto Dautz, and the dynamo from Gramme Co., also of Paris. The lamps are metallic filament, and there is also an arc lamp of 2,000 candlepower.

This theater has a seating capacity of 600, and it has plenty of doors, ventilators, fireproof projection-apparatus chamber, and other modern improvements.

Prices—Films.

Prices: Seats, 10, 15, and 20 cents; boxes, 80 cents and \$1 each, accommodating 4 to 6 persons. There is a stamp duty (2.2 cents) for each 20-cent ticket for the benefit of the Hedjaz Railroad. Five thousand feet of films are used for each show, and the program is changed twice a week. Each new program is duly advertised in four languages, Turkish, Greek, Armenian, and French.

The films are mostly of French manufacture, Gaumont and Pathé Frères, and sometimes American, of the Eclipse American Vitagraph Co., etc. The company receives the films from Constantinople and occasionally from Saloniki at a cost of 6 or 8 centimes (1.16 to 1.54 cents) a meter for each program. For American films the company would be willing to pay more, because they enjoy a great popularity and are always received with much enthusiasm by the people who are very fond of subjects like detective stories, cowboy and Indian life, etc., and they appreciate the clearness of the American films.

The show usually lasts 1½ to 2 hours, starting about 8 o'clock each evening. Two performances are given. There are no matinees except on fête days, so profits have to be made from night performances only.

Turkish Agency for American Films.

It would not pay for an American firm to send films only for the Trebizond theater, but there are many moving-picture shows in Turkey and several in this part of the country, and as their number is daily increasing there is a good chance for an American concern to

establish an agency at Smyrna, Saloniki, or Constantinople and have its films make the round of several moving-picture theaters. There is no doubt that American films will be preferred and that the business will prosper.

The moving-picture theater of Trebizond has installed an American pianola, made in Indiana, which was bought from the Constantinople agency for \$700, on monthly installments.

MEXICO.

[From Consul T. C. Hamm, Durango.]

There are at present two moving-picture theaters in Durango—Salon Golondrina and Salon Rojo. Both are members of regular film-exchange circuits, one with headquarters in Mexico City and the other in San Luis Potosi. The films are changed daily and 7 to 10 pictures are shown at each performance. Most of the films in use are imported from France, although a few, chiefly cowboy and "Wild West" pictures, are obtained from the United States. Some Spanish films depicting bull fights are shown.

The proprietor of the Salon Golondrina informs me that he attempted to import all his films from the United States, but that the length of time required and the uncertainty of regular shipment made the venture a money-losing proposition. He further stated that the explanatory matter was all printed in the English language, an innovation which proved anything but popular. A Powers machine of American make is the one now in use and is giving entire satisfaction.

In order to enter this market successfully three things at least are essential: (1) Prompt and continuous service; (2) a large variety of subjects; (3) all explanatory matter must be in the Spanish language.

HONDURAS.

[From Vice Consul Kenneth Stuart Patton, Ceiba.]

There are no moving-picture shows in Ceiba now (March, 1912). There was such a show here several months ago, but the enterprise failed on account of the inability to secure film exchanges and suitable quarters and because of the quality of the machine operated.

It might be feasible to bring a traveling motion-picture show to Ceiba, provided a change of program could be effected at every performance, or at least very frequently, and a suitable hall secured. At the present time there is such a hall, and a Spanish vaudeville company is showing there. It will probably remain only a short while. The best season of the year to start such a venture would be from March until August, these months being the time in which the fruit trade is at its liveliest and when the natives have more money to spend. Truxillo and Puerto Cortes are the only other towns on this coast that would be capable of supporting such an enterprise.

Cost of Transportation a Factor.

One could ascertain the cost of bringing the necessary paraphernalia here by consulting either the United Fruit Co., or Vaccaro Bros. & Co., both of New Orleans. These companies run the only steamers

between Ceiba and the United States. If the initial expense is heavy, it would not be advisable to undertake the risk. Vaccaro has a small electric plant here for his offices and shops and might be willing to supply electric power if such be feasible.

Admission might be placed at 10 and 20 cents. It would probably be impracticable to give more than four or five performances a week, and these should be at night, inasmuch as the population is a busy one.

In case any American firm try the venture, it would be well to bring along films and take pictures of trips up the beautiful tropical streams that run from the mountains to the coast through wonderful forests.

MALTA.

[From Consul James Oliver Laing, Valetta.]

Two methods of introducing the advertising into motion pictures have been employed. One is to show signboards advertising merchandise in the scenery or setting of a moving-picture drama. The other is to introduce the names of commercial exhibitors into films representing a country fair such as the well-known yearly fairs of England or a market scene such as the markets of Nizhni Novgorod. The display of the firm's name is followed by a series of pictures representing its exhibit at the fair or the working of its plant. Some criticisms have been made of the first method, the signs displayed (on account of incongruities of time, place, or situation) being sometimes ill adapted for association with the scenes in which they are placed.

INDIA.

[From Consul Edwin S. Cunningham, Bombay.]

The principal cities in this consular district are Bombay, with a population of almost 1,000,000; Ahmedabad, 186,000; Poona, 153,000; and Baroda, 1,000,000. There are five moving-picture shows in Bombay, four of which use Pathé machines and one a Gaumont. The majority of the films are of French manufacture, Pathé, as a rule, but other films are—Itala Co., Italy; Barker Motion Photography Co., London; Gaumont & Co.; Urban Manufacturing Co.; Cines Co., of Rome; Edison Co.; and Vitagraph Co. So far as I am advised, the American films are used by only one of the local theaters. There are no manufacturers of either moving-picture or cinematograph machinery in this district.

AUSTRALIA.

[From Consular Agent U. W. Burke, Fremantle, West Australia.]

The principal cities and towns of West Australia are Perth, the capital, with a population of 55,000; Kalgoorlie and Boulder, 29,000; Fremantle, 20,000; Midland Junction and Guildford, 6,000; Geraldton, 4,000; Bunbury, 4,000; and Albany, 3,000. Moving-picture shows are in operation in each of these places, the machines used being Pathé and Gaumont, and the films American, English, and French. Moving-picture machines are not manufactured in this State.

SAMOA.

[From Consul Mason Mitchell, Apia.]

Apia has a population of about 600 whites and half-castes, and the island, Upolu, has 22,000 natives. Moving-picture shows come from Australia several times a year, remaining a month, and then going to the Fiji or Tonga Groups. A local company was recently organized in Apia, which gives three shows a week. It uses a French machine and obtains its films from Sydney, Australia. The films are of American and European manufacture.

THEATER-FIRE PREVENTION IN GERMANY AND FRANCE.

[From Consul General A. M. Thackara, Berlin.]

The police regulations of the city of Berlin regarding the fire-prevention measures to be taken in theaters and other places where moving-pictures are exhibited are exceedingly strict and carefully enforced.

According to the police regulations of September 30, 1907, the booth in which the projector is installed must be made of either sheet iron or sheet steel and the sides and floor lined with asbestos at least one-third of a centimeter (0.13 inch) thick. New police regulations are in course of preparation. I am informed unofficially that under the new provisions the booth must be constructed with double sheet iron or sheet steel walls, with an intervening air space. In no case would booths constructed of angle iron and covered with asbestos boards be permitted in this district.

Main Provisions of Police Regulations.

A translation of the more important paragraphs of the 1907 Berlin police regulations for moving-picture theaters follows:

SECTION 1. Whenever moving pictures are exhibited in theaters, assembly rooms, stores, tents, or other public places, and inflammable films are used, electric or calcium light must be employed for purposes of illumination. Gas for the production of a calcium light must either be taken from the city gas mains or made in a safe generating apparatus which complies with the law.

Sec. 2. The electric or calcium lamp must be placed in a sheet-iron or sheet-steel booth, of which the bottom and sides are lined with asbestos. So far as will not interfere with the operation of the apparatus, the air holes in the booth must be covered on the inside with wire gauze or similar material, so that lamp sparks may not escape.

Sec. 3. All electrical apparatus must be mounted on tables of unflammable material, and must be provided with safety hoods of fireproof insulating material.

Sec. 4. When a limelight is used, only the so-called safety lamps, in which the gas mixture is effected just before ignition, or a mixture burner, in which the gas mixture is effected inside the burner, may be employed. With mixture burners a safety device of wire gauze or some similar contrivance must be so arranged as to prevent a back draft of the flame into the mixture chamber. There must also be metallic attachments on the saturator and on the mixture chamber, to which the safety device is fastened and to which the pipes (india-rubber hose) must be firmly attached. Oxygen may be stored only in steel cylinders or other metal containers. The use of rubber sacks is prohibited.

Limelight, Film Drums, Nonflammable Hangings, etc.

Sec. 5. When ether-benzine or gasoline limelight is used (for plants in places which can not obtain illuminating gas), the ether-benzine or gasoline fluid serving to feed the flame must be kept outside the lamp booth in a receptacle which complies with the law. This receptacle (saturator) must be connected with the oxygen cylinder by good and well-attached rubber hose. The saturator must contain porous substances to absorb the volatile ether or gasoline. The saturator may be filled only in a room separate from that in which the production of the moving picture is to take place, and only by daylight or by the light of a nonexplosive artificial light. Ether-benzine

or gasoline calcium lights may never be used in which the saturator is united with the burner or is attached to the inside of the lamp booth. The supply of ether, benzine, or gasoline must not be stored within the theater. The quantity kept within the theater may not exceed 2 kilos (4.4 pounds). It must be kept in a metal receptacle made safe against rust and the openings in which are provided with safety devices to prevent back drafts.

SEC. 6. The intense heat and light rays which pass through the lens must be shut out or weakened by safety shutters as soon as the film stops unwinding.

SEC. 7. The portion of the film which is at any moment between the light and the lens must be so isolated from the remainder of the film that, should it ignite by reason of the intense light rays passing through it, the fire will not extend to those portions of the film which have already passed by the film or are yet to pass.

SEC. 8. The film must be unrolled from a metal drum which is completely closed except for the exit opening for the film, and this opening must be so narrow that the entry of a flame is impossible.

SEC. 9. The apparatus, the lamp booth, and the lamps may not be used until they are tested under the inspection of a representative of the fire department or other competent judge, and are declared to be free from objection.

SEC. 10. The apparatus must be so set that no inflammable or flimsy stuff (paper and the like) is immediately over it. A noninflammable cover must be kept beside the apparatus, to throw over it in case of fire; also a basin of water and a fire extinguisher.

Other Precautions.

SEC. 11. The supply of films not actually in use must be kept in closed metal receptacles.

SEC. 12. Smoking is prohibited in the apparatus booth and in the vicinity of the films. If the apparatus booth is hung with curtains, these must be of a material not easily set on fire.

SEC. 13. The apparatus may be operated only by one who, after proving himself competent, has been licensed by the police. When electric or calcium light is used he must be well-informed as to the handling of the same.

SEC. 14. In the case of productions in theaters or halls which hold more than 500 persons, if the operation of the apparatus and the lighting of the theater are not done by the same man, a signal device must be placed beside the apparatus in order that the man in charge of the house lighting may be apprised of an existing fire or other trouble and turn on the lights in the theater.

SEC. 15. The apparatus must be so set up that the public can not come within reach of it. A safe exit must be provided for the operator of the apparatus; for the spectators there must be a sufficiently broad exit on the opposite side of the house from the apparatus.

SEC. 16. Exceptions to the above regulations may be made in cases in which other examined and approved special provisions are taken for safety. Special instructions given to owners of moving-picture shows must be observed in like manner as the contents of this order.

A Noninflammable Film.

So far as I have been able to ascertain, there is no truly noninflammable film manufactured in Berlin. There is, however, a film of acetycellulose whose makers [name obtainable from the Bureau of Manufactures] claim that it is waterproof like nitrocellulose films and otherwise similar to them, except that it is rather difficult of ignition and slow-burning when ignited. It is on this latter ground that the term "noninflammable" is applied to it.

(From Consul General Frank H. Mason, Paris.)

Safety Secured by Construction of Apparatus.

Safety from fire at cinematograph or moving-picture exhibitions in Paris is secured not by inclosing the apparatus in a fireproof booth or cell but by the construction of the apparatus itself. In the case of large cinematograph theaters, the apparatus is generally placed outside the auditorium; but the chief security is in the construction of the machine, which may be briefly described as follows:

The film is wound in a metallic cylinder called a "choker." When

in use the film passes downward in front of the lens and is automatically coiled in another metallic, fireproof "choker." Only a small section of the film—about 6 inches in length—is exposed to the rays from the lens, and should this section take fire it could not possibly ignite the portions of the film inside the "chokers" or cause a conflagration; but to avoid even this danger there is placed between the lamp and the lens a crystal vase or tank filled with water, which effectually prevents overheating the film by rays from the light.

To further secure this result a flap or movable diaphragm of metal is placed close to and in front of the film, and this is opened only when the apparatus is put in motion and closes automatically when it stops, shutting off the light from contact with the film the moment the projection is finished or suspended. This device and the existing police regulations appear to be quite effective, and there is, so far as appears, no demand that the apparatus shall be further inclosed in a fireproof booth.

[A copy, in French, of the official police ordinance which is required to be kept posted in all theaters, concert halls, and other places of public amusement, and which includes all the regulations relating to the subject now in force in Paris and the Department of the Seine, also an illustration of the machine described in the foregoing report, will be loaned by the Bureau of Manufactures.]

OPERA CHAIRS FOR AMUSEMENT HALLS.

[From Consul S. M. Taylor, Nottingham, England.]

There are no firms in Nottingham acting as agents for theater chairs, but for this purpose American firms might correspond with the furniture dealers whose names and addresses are obtainable from the Bureau of Manufactures. I have made inquiries as to the opportunities for such chairs, and the situation appears to be:

As soon as moving pictures began to be housed in theaters of their own, firms for the manufacture of their furnishings were established. There are now about a dozen of these, situated in London, Liverpool, Manchester, and Birmingham. When a new picture theater is decided upon, the architect or builder writes for estimates to the several firms, and naturally selects the lowest bid. Competition is very keen and prices are cut to a fine point.

An indication of British prices, which may be of value in estimating conditions of the local trade, follows: Folding birch chair, 95 cents each; garden or exhibition chair, folding iron frame, varnished lath seat and back, 54 cents each; seats or chairs to be attached to floor in rows, 15-inch centers, 12½ inches deep, solid wood stained any color, polished backs 5½ inches, painted iron standards, 95 cents each; same, with seat and back with upholstered center, finished banding and brass studs, covered American leather cloth, \$1.21 each; seats or chairs to be attached to floor in rows, 16 to 18 inch centers, 5-inch stuff-over back, seat 14 inches deep, well upholstered, 3 to 5 inches thick, covered in good quality Utrecht velvet or railway rep, \$1.82 each.

The best method of reaching the local trade is to deal through a wholesale distributing agency in London, Liverpool, or Manchester, which would act as a center for the British trade generally. I am

very doubtful whether it would be found profitable to establish an agency in this city, as the amount of business to be done here in the future is likely to be limited, the community being already well supplied and almost oversupplied with moving-picture shows.

[From Consul General John L. Griffiths, London, England.]

British Prices Low.

Prices of British-made theater chairs are very low, and when the seating of a hall is installed under contract prices in the aggregate rule slightly lower. It is thought that the public generally prefers upholstered or leather (usually imitation) covered chairs, and that steel chairs would not be popular. So far as cinematograph theaters and ordinary theaters and halls are concerned, it would appear that the present local demand is fully supplied; in fact, in many districts they are already so numerous that the margin of profit is frequently at a minimum, and, being already fitted, the introduction of new chairs in place of those already in use would not commend itself to the owners.

[From Consul Robert Frazer, Jr., Valencia, Spain.]

Valencia a Furniture-Manufacturing Center.

Present prospects for the Spanish importation of opera chairs and general seating supplies for theaters and other places of amusement are not encouraging so far as the Valencia district is concerned.

With the sole exception of trial samples of office furniture and barbers' chairs, no furniture of any kind has been imported here during the past 8 years. Valencia is one of the most important centers of Spain for the manufacture of chairs and miscellaneous furniture; and although the greater part of the lumber used by furniture factories is imported, the employment of modern machinery and abundance of labor at a low wage scale contribute to cheapen the cost of production, while the very high tariff on imported furniture effectively excludes foreign competition.

Plain wooden chairs without moldings or ornamentation pay a duty of \$13.51 per 100 kilos (220.46 pounds), which is equivalent to an ad valorem duty of about 40 per cent, as the value on which the tariff schedule was based was \$33.80 per 100 kilos. Chairs the wood of which is turned or with moldings attached pay \$28.95 per 100 kilos, and chairs upholstered with leather, silk, or silk mixtures pay duty at the rate of \$33.80 per 100 kilos, the estimated cost of production on which this last-named tariff was framed being \$96.50 per 100 kilos.

American Styles Copied.

The few sample chairs and pieces of office furniture imported from America serve only as models for imitation, and an important factory recently established at Barcelona is turning out exclusively American designs, which are reproduced with marked fidelity in form and appearance.

The chairs most in demand here are of plain wood, seated with stamped veneers, or rushes and sedges grown on the borders of the marshes and rice fields near this city, and cost only 50 cents per chair complete. These chairs are piled in thousands during the long summer in the public parks, open-air theaters, churches, etc.,

and are hired at the rate of 1 to 5 cents per hour or performance, according to the importance of the festivity or celebration.

There are no importing merchants or jobbers in foreign furniture in Valencia, and all firms engaged in the furniture trade appear to take it for granted that there is no possibility of competing with home products at present.

[From Consul General Thomas Sammons, Yokohama, Japan.]

Japan Supplies its Own Needs.

The ruling factor in the sale of chairs for amusement halls in Japan is cheapness; and although quality and durability are desirable features, the cost of the homemade article is so low and so adapted to the present needs of the people that little encouragement can be held out as yet for the sale of Western equipment. Of the four classes into which the seats of amusement halls in Japan are divided, only two, the "special" first and the first class are provided with chairs, the greater majority of seats included in the third and second classes being merely rude wooden benches.

Lists of moving-picture theaters or other pertinent names that accompanied the foregoing and other consular reports may be had upon application to the Bureau of Manufactures. Among earlier articles on the foreign cinematograph trade that have been published in Daily Consular and Trade Reports were those appearing in the issues for Aug. 5 and Oct. 12, 1910; Jan. 14, Apr. 28, May 29, Aug. 22, and Oct. 7 and 14, 1911; and Jan. 13, 1912.

WIRELESS TELEGRAPHY AT CONSTANTINOPLE.

[From Ambassador W. W. Rockhill.]

The Imperial Ottoman Government has communicated the following note, dated April 21, concerning the prohibition of the use of wireless telegraphy on all vessels at Constantinople:

In conformity with the principle admitted in the last international telegraph conference at Lisbon and in view of the present extraordinary circumstances, the Imperial Government has decided to forbid to vessels found at the port of Constantinople the use of wireless telegraphy. Besides, such private correspondence causes to the working of the State apparatus some perturbation which at the present time may have serious consequences.

In bringing this decision to the notice of the embassy of the United States of America, the Ministry for Foreign Affairs would be much obliged if the embassy would be good enough to immediately communicate it to the captains of its national vessels and see that it is scrupulously complied with.

Central Oil Depot Proposed in Philippines.

Manila papers state that the Standard Oil Co. has renewed its application to the insular government for an allotment of space on the Malecon-Luneta fill, and if it receives favorable consideration will erect a large pier and a storage plant. The plans of the company call for a large modern pier capable of accommodating the largest steamers, the cost of which is estimated at \$400,000. The shore plant will provide for the concentration of all the business of the company in Manila. These structures will cost in the neighborhood of \$3,500,000.

SAN FRANCISCO-AUSTRALIAN MAIL LINE.

[From Consul Mason Mitchell, Apia, Samoa, confirming announcement from Sydney, Australia, in Daily Consular and Trade Reports for June 3.]

The Oceanic line of steamers is to resume its sailings on July 2, running monthly from San Francisco to Sydney via Honolulu and Pago Pago.

It is further reported to be the intention of the company to put on two ships at first, which, by their contracts, will have to make the trip from San Francisco to Pago Pago in 13 days and from San Francisco to Sydney in 20 days. These ships have recently been supplied with oil burners and will have to be tried before it will be possible to tell whether they can make the trip in time to enable them to call at Apia.

It is thought that the calling of this line of steamers at Apia would mean an increase in American trade, besides being of great value on account of the tourist traffic. It is estimated that each ship would land at least 250 tons of cargo from San Francisco.

The harbor of Apia has been free from heavy storms since 1889 and the island is believed to be outside the hurricane zone. There are 75 miles of good roads in Apia and plenty of vehicles, and beautiful and picturesque waterfalls and picnic grounds are near by.

AUSTRALIAN WHEAT HARVEST.

[Statement of the High Commissioner for the Commonwealth of Australia in London.]

Complete returns of the Australian wheat harvest of 1911-12 have not yet been issued, but on the figures so far available it is estimated that the exportable surplus of the Commonwealth will exceed 44,000,000 bushels. The surplus of each State is set down as follows: New South Wales, 13,616,000 bushels; Victoria, 11,891,000 bushels; South Australia, 16,500,000 bushels; Western Australia, 2,000,000 bushels. These figures are approximate, and it is considered not unlikely that when the complete returns of the harvest come in it will be found that the total will be somewhat larger. The total production of the Commonwealth for 1911-12 was 72,550,000 bushels, a decrease of 22,560,000 on the previous year's harvest, which was a record one. New Zealand's harvest this year is 6,480,000 bushels (a falling off as compared with last year of 1,800,000), which makes the total for Australasia just over 79,000,000 bushels. The Australasian total last year was 103,380,000 bushels.

The Pan American Railway in Guatemala.

Of the 33 miles necessary to complete the Pan-American Railroad gap in Guatemala, the construction of which was inaugurated on November 21, 1910, Consul General Bucklin states that 7 miles have now been completed and trains are being run, these 7 miles being from Las Cruces on the Central Railroad to San Miguelito, giving thus access to additional rich coffee-producing estates. It is not contemplated that the remaining 26 miles will be completed before two years more, labor being scarce.

Conferences on Venezuelan Business.

Mr. Jefferson Caffery, secretary of the American Legation at Caracas, was due to arrive in New York June 13 on the Red D Line. He expects to be at the Hotel Astor for a time, and may be seen by those interested in Venezuelan business affairs.

CANAL TRAFFIC OF THE GREAT LAKES REGION.

CANADA.

[From Montreal Gazette; see also Daily Consular and Trade Reports for May 10, 1911.]

Canadian canals are divided into several sections, the most important of which are those of the St. Lawrence system between Montreal and Fort William. The others serve local rather than general business, and in the cases of the Chambly, the St. Peters, the Murray, and the Ottawa River waterways there was considerably less business done in 1911 than in 1910. As regards the Chambly and the Ottawa system this decrease may have been as much the result of the competition of the railways as of any decline in trade.

Taking the whole of the canals, there was moved through them in the season of 1911 a total of 38,030,000 tons of merchandise. This compares with 42,990,000 tons in 1910, the decline being due to a falling off at Sault Ste. Marie, chiefly because of slowness in the United States ore trade. The traffic of 1911, however, was double that of 1908 and four times that of 1905.

[For the distribution of this freight tonnage among the different canals of the Dominion see Daily Consular and Trade Reports for June 7, 1912, page 982.]

Wheat Shipments through the Soo.

By mutual understanding the canals on either side of the St. Marys River are open to the vessels of Canada and the United States on equal terms. As a result there passes through the Canadian lock much of the domestic traffic of the United States. The Sault canal is, however, of decided benefit to Canadian business. There passed through it last year 63,641,000 bushels of Canadian wheat, and this was 12,000,000 bushels more than in 1910 and 15,600,000 bushels more than in 1909. There also passed through the United States canal at the Sault 1,981,000 bushels of Canadian wheat, making the total going from Lake Superior to Lake Huron 65,622,000 bushels. If to this is added the equivalent in grain of 183,000 barrels of Canadian flour passing through the Canadian and 841,000 barrels passing through the United States canal, the total wheat shipments would be 69,723,000 bushels.

The destination of the wheat is thus given, in bushels: From Fort William—to Montreal 12,761,000, Georgian Bay ports 9,881,000, other Canadian ports 11,880,000, Buffalo 27,945,000; from Duluth—to Buffalo 710,000, Georgian Bay 461,000. In this regard the record of 1911 was a little more favorable to Buffalo and a little less favorable to Canadian ports than that of 1910 or 1909.

UNITED STATES.

American official statistics of the commerce of the canals at Sault Ste. Marie, Mich., and Ontario, Canada, during the seasons (nine months) ending December 31, 1909, 1910, and 1911, give the following figures in short tons:

Freight.	9 months ending December, 1909.		9 months ending December, 1910.		9 months ending December, 1911.	
	United States canal.	Canadian canal.	United States canal.	Canadian canal.	United States canal.	Canadian canal.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Eastbound.....	22,028,768	24,350,318	15,602,673	31,531,036	10,442,295	25,867,104
Westbound.....	8,103,606	3,412,457	10,324,988	4,904,521	12,081,052	4,966,765
Total.....	30,132,374	27,762,775	25,927,661	36,435,557	22,523,347	30,833,869

This freight had an estimated value in 1909 of \$626,104,173 and in 1910 of \$654,010,844. Values for the calendar year 1911 are not yet available. Through freight westward by passenger vessel consists principally of what is known as "package freight" or general merchandise for distribution at and through upper Lake ports. Westbound cargo consists chiefly of coal, this commodity comprising 90 per cent

of the total westward traffic in 1911. Eastward freight includes iron ore as the principal item; also flour, grain, and lumber. Passenger traffic is about equally divided in both directions; it amounted to 79,951 persons in 1911, 66,933 persons in 1910, and 59,948 persons in 1909.

The traffic through the Portage Lake ship canals for the last three seasons was as follows: Cargo—1909, 2,592,168 short tons, estimated value \$85,400,667; 1910—2,453,836 tons, value \$77,455,763; 1911—2,200,402 tons, value \$79,012,209. Passengers—1909, 52,131; 1910, 65,334; 1911, 66,526.

FEMININE VOTERS IN DENMARK.

[From Consul General E. D. Winslow, Copenhagen.]

Women residents of Copenhagen have the franchise in municipal affairs. It is interesting to note what percentage of the voting population exercised the privilege at the last election for the board of aldermen. It was shown that 70,326 men and 67,473 women had the right to vote, and of this number 56,795 men and 46,347 women went to the polls. This vote indicates that 80.8 per cent of the men and 68.7 per cent of the women electors used the ballot at the spring election. The votes cast of both sexes represents 74.8 per cent of the total registration. The percentage in 1909 was 75.2 per cent.

British Steel Prices Advanced.

Scottish steel makers announce a further advance in the price of angles and ship and boiler plates of 5s. (\$1.217) per ton, making the prices for these \$36.45, \$38.30, and \$42, respectively, all less 5 per cent for Clyde delivery or equal. This places their prices on the same level as those of the northeast of England producers. This is the fourth advance of 5s. per ton intimated since the rebate scheme came into operation in October last.

Final Indian Crop Forecast.

The final Government forecast of the Indian crops for the season 1911-12 indicates a total yield of wheat of 9,812,500 tons compared with a yield of 9,921,300 tons in 1910-11. The total yield of linseed is estimated at 640,500 tons against 557,800 tons in 1910-11, and the total yield of rapeseed is placed at 1,270,500 tons against 1,250,300 tons in the preceding season.

Olive-crop Prospects in Syria.

Consul General W. Stanley Hollis, of Beirut, reports, under date of May 10, that experts predict a very small olive crop in that part of Syria, principally because of the heavy production last year and the continual changes in the weather during the past four months.

The Hoangho bridge, which the Tientsin-Pukow Railway is building at a cost of \$2,500,000, is to be opened with elaborate ceremonies next October. It is the finest of its kind in China.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9018. Guayule and raw rubber.**—An American consul in a European country reports that a resident of his district would like to communicate with persons in the United States controlling guayule and raw-rubber interests in Mexico or Central America. He desires connections for his trade with European rubber industries, and estimates that he could dispose of about \$1,000,000 worth of this product to the local trade.
- No. 9019. Crocidolite.**—A request has been received at an American consulate in South Africa from a business firm for the names of American manufacturers of jewelry and other articles who would be interested in the importation of raw crocidolite, to be made into ornaments of various kinds, for which there is a good market in the United States. Copy of the complete report, giving particulars regarding the prices of the materials as well as samples of the finished and raw products, will be sent to interested firms by the Bureau of Manufactures.
- No. 9020. Agency for American goods.**—A new agency for American goods is being opened in a Central American city. An American consular officer reports that the head of this firm is an American business man who has had many years of successful experience in railroad and other lines. He is now extending his business by opening an agency, and wishes to get into touch with important lines of goods for which there is a market in Central America. He is said to bear an excellent reputation for business reliability. Bank references are furnished.
- No. 9021. Hydro-aeroplanes.**—It is stated that a foreign Government will make some extensive purchases of aeroplanes and hydro-aeroplanes in the near future. The plans contemplate the purchase of 30 of these machines, as a beginning, and it appears that American makes would probably be preferred on the basis of merit. Emphasis is laid upon carrying power. An American consul writes that an appropriation of \$515,000 was made recently for these purchases, and within a short time 100 aeroplanes have been ordered for the army from three different companies. A valuable contract with an American firm is liable to be forfeited because of the company's delay in delivering the goods.
- No. 9022. Rubber and other African products.**—The Bureau of Manufactures is in receipt of a communication from a business man in Africa stating that he would like to get in touch with American firms purchasing supplies of rubber. He has forwarded samples of the material, which can be obtained by addressing the Bureau of Manufactures. He states that in addition to crude and refined rubber he ships regularly ebony wood, wax, etc., in which lines he is also open for connections. Bank references are furnished.
- No. 9023. Subsoil plows.**—An American consul in the West Indies reports that a company which grows bananas extensively for export wishes to correspond with American manufacturers of subsoil plows that will break the soil to a depth of 18 to 20 inches. Catalogues in English, export prices, and full details should be sent at once.
- No. 9024. Breakwater and wharf.**—The American consul general at Ottawa reports that the Department of Public Works, Ottawa, Canada, has advertised for bids, to be received until June 27, for the construction of a breakwater wharf at Carrs Brook, Colchester County, Nova Scotia; also for tenders, to be received until July 2, for the construction of a pile-bent wharf at Boswell, division of Nelson, Kootenay district, British Columbia. Plans, specifications, and form of contract can be seen and forms of tender obtained at the Department of Public Works, Ottawa.
- No. 9025. Boston white rum.**—A European export agent informs an American consular officer that he is in the market for large quantities of Boston white rum, in barrels of 120 gallons each, price to be about 23 cents per gallon, 100 per cent. He is desirous of quick action, as he has several large contracts on hand which must be closed at an early date.
- No. 9026. Gasoline motors, oils, and automobile accessories.**—A firm in a Mediterranean country desires to communicate with American manufacturers of gasoline motors, heavy oil, transmission belts, lubricating oils, and accessories for automobiles. An American consul reports that the firm has well-equipped show-rooms and supplies first-class references.

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15th Year

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COMMERCIAL CONDITIONS IN PANAMA.

[By Consul General Alban G. Snyder, Panama City.]

There was no marked change in conditions in Panama during 1911, and there are no particular circumstances that would seem to indicate any striking increase in prosperity in the near future. As the canal nears completion the gradual discharge and departure of hundreds of employees is certain to affect conditions, and the loss of the harvest of money after each canal pay day is sure to be felt for some time.

Aside from this the effect on this country of the completion of the canal is as yet a rather uncertain matter. Some people consider as a certain result the coming of great prosperity to the country as a whole and the growth of this city to a thriving metropolis of 100,000 population in a few years. Others admit a considerable benefit to the country, but assert that the greater part of the local prosperity will go to Balboa, the Pacific terminus, and predict the gradual decline of Panama City. Some few who hold the former opinion are investing in buildings in this city and construction has shown more activity in the last few months than for many years.

Land Investments—Public Works.

Americans have lately shown an increased interest in the land situation in Panama, and the Government is making efforts to encourage agriculture, but investors would do well to be careful and go slow in such matters. While this country, like the rest of Latin America, may offer a good opportunity for capital in the development of its immense resources, it is not a suitable place for the investment of the capital of Americans of moderate means. During the last part of 1911 conditions here were somewhat unsettled, but on the whole business slightly increased during the year, especially American trade.

The public works provided for in laws passed early in 1911 have been pushed forward, and the Secretary of the Department of Public Works is planning further improvements. Road-building machinery of the latest model has been secured, and road building, which under old methods cost about \$7.20 per linear meter for a 16-foot road, has been reduced to \$4.40, and the secretary, who is himself an engineer,

hopes eventually to reduce the cost below \$4. He has planned interior developments for some time to come and has built up a good body of assistants. He shows an active interest in the work, and it is stated that the economy effected is considerable.

A rock crusher and equipment are to be forwarded soon for the work on a proposed important road 13 miles long from Mensabe to Las Tablas, and it is said that the secretary intends to recommend the building of a telephone line between those points. Work is also to be started shortly on a road between Puerto Posado and Penonome, and work on the Juan Diaz road is progressing satisfactorily. The port of Chitre has been opened up, greatly facilitating shipping at that place. A canal 150 meters long and 50 meters wide was dug through a neck of land caused by a bend in the river at that point, which has made the port accessible without the old delays caused by waiting on available tides. This canal has shortened by about 2 miles the distance between the anchorage and the bar, and a wharf is to be built later at this port.

Public Improvements.

The water service in the city of Panama was unsatisfactory in 1911, but the Zone officials say that the recent replacing of the old main by a larger one will remedy the trouble. Other items of public improvement during 1911 were the completion of the imposing National Institute in this city, provision for a new municipal slaughterhouse, the completion by the Canal Zone Government of what is to be the trans-Isthmian road as far as Gorgona, or a distance of 22 miles, the completion of a road from the Sabanas Road to old Panama, and the clearing and opening up of the old city destroyed centuries ago by Morgan, with all its interesting and possibly valuable revelations. The street railway company has opened offices in this city, and it seems now the long-talked-of street car line would be an accomplished fact. [The name of the general manager of this project can be obtained from the Bureau of Manufactures.]

Import Trade of the Year.

The following table of imports into Panama in 1911 shows the share of the principal countries in the larger classifications of the trade:

Imports.	United States.	United Kingdom.	Germany.	France.	Other countries.	Total.
Animal products.....	\$1,098,981	\$311,005	\$121,596	\$22,226	\$111,062	\$1,664,870
Vegetable products.....	1,465,724	460,648	403,649	32,782	430,108	2,792,911
Mineral products.....	568,546	134,744	111,030	10,114	84,537	908,971
Textiles.....	578,074	803,621	90,119	13,558	144,030	1,630,002
Chemical and pharmaceutical products.....	191,100	90,426	117,286	25,979	13,273	438,064
Liquors, distilled and fermented.....	281,011	114,098	52,406	192,862	104,518	744,955
Paper, and manufactures.....	61,126	9,771	33,957	1,520	5,948	112,322
Machinery.....	257,516	24,666	50,827	6,228	3,719	343,956
Vehicles.....	33,351	4,034	51	1,225	2,269	40,930
Arms and explosives.....	26,290	6,118	3,849	.....	8,335	44,592
Other articles.....	541,914	308,270	131,304	85,084	77,309	1,143,881
Total.....	5,104,233	2,267,401	1,116,134	391,578	986,108	9,865,454

Some of the more important items in detail and the countries sending the principal amounts were as follows: Automobiles and accessories: United States, \$6,300. Beer: Germany, \$24,000; United States, \$159,000; England, \$39,600; Belgium, \$9,800. Blacksmith

materials: United States, \$20,500. Codfish: United States, \$47,000; England, \$8,000. Cigarettes: United States, \$34,000; England, \$24,000; Latin-American countries, \$48,000. Electrical materials: United States, \$52,000; England, \$2,000; Germany, \$1,200. Flour: United States, \$357,000. Furniture: United States, \$88,000; Germany, \$11,000; England, \$7,500. Gasoline: United States, \$26,000. Photographic material: United States, \$24,000. Paints: United States, \$36,000; England, \$31,000. Petroleum: United States, \$84,000. Red wine: United States, \$47,000; Spain, \$19,000; France, \$15,000. Ready-made clothing: United States, \$283,000; England, \$82,000; Germany, \$32,000; Spain, \$21,000. Rice: United States, \$23,000; Belgium, \$12,000; Germany, \$307,000; China, \$10,000. Shoes: United States, \$452,000; China, \$10,000. Soap: United States, \$95,000; England, \$58,000. Sugar: United States, \$78,000; Germany, \$48,000; England, \$38,000. Tea: China, \$2,600; England, \$29,000. Cotton thread: England, \$36,000; United States, \$3,400. Leaf tobacco: United States, \$24,000. Manufactured tobacco: England, \$79,000; Latin-American countries, \$16,000; Belgium, \$9,000; United States, \$4,500. Wire fence: United States, \$33,000.

Export Trade—Declared Exports to United States.

The exports amounted to \$2,853,725, the countries to which they went being as follows: United States, \$2,566,115; Germany, \$157,302; England, \$125,170; France, \$4,683; and Italy, \$455. Exports to the United States declared through this consulate were as follows in 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Cocobola.....	\$40,466	\$37,847	Ipecac.....		\$13,739
Deerskins.....	7,956	15,100	Mahogany.....	\$1,519	7,392
Gold bullion.....		1,252	Rubber.....	201,686	30,379
Hides.....			Shell.....		6,580
Dry.....	33,205	28,320	Tuna gum.....		2,309
Wet.....	64,069	62,022	All other articles.....	9,399	3,367
Household effects.....	1,469	1,084			
Ivory nuts.....	60,265	56,060	Total.....	420,034	265,431

Returned American goods, consisting of machinery, typewriters, jewelry, cinematograph films, etc., amounted to \$7,904 in 1910 and \$9,865 in 1911. There were no invoices certified to Porto Rico, Hawaii, or the Philippines.

National Finance.

The national revenue for 1911 amounted to \$3,695,888 and actual expenses to \$3,686,326. In addition, the Republic has \$6,000,000 invested in first-class mortgages in New York, besides the money on deposit to guarantee the fractional silver currency. On the inauguration of the present administration on October 5, 1910, debts were pending against the national treasury amounting to \$600,000, on account of which the executive authority contracted a loan of \$250,000 from local banks to meet punctually the public obligations and carry out urgent public improvements. The increase of import duties from 10 to 15 per cent ad valorem increased the treasury receipts to such an extent that a part of this loan could be paid, and only \$104,000 is now due on it. The previous public debt was also reduced about \$265,000. The national credit is therefore better than for some time past. The present debt of about \$334,000 has not been

met owing to the expense involved in the construction of the National Institute, but its payment by monthly installments has been provided for through an agreement with local capitalists.

Population by Provinces—Deaths, Immigration, etc.

According to a census completed in 1911, the population of the Republic, by Provinces, was as follows:

Provinces.	Other than Indians.	Indians (estimated).	Provinces.	Other than Indians.	Indians (estimated)
Bocas del Toro.....	22,732	.....	Panama.....	67,724	3,123
Cocle.....	35,011	.....	Veraguas.....	51,344	8,276
Colon.....	24,837	7,255	Total.....	300,564	36,178
Chiriqui.....	45,834	17,530			
Los Santos.....	53,082	.....		

Of the total number, 46,323 are whites and the rest mixed, negroes, etc. According to the Canal Zone census of 1908 the population, under the jurisdiction of the zone authorities in Colon and Panama, was 50,003, making a grand total for the Panama Republic of 386,745. The estimated population of the whole Canal Zone, according to the sanitary department, was 90,186 in 1908. A new census of the Canal Zone is now being taken.

According to the report of the chief sanitary officer, Isthmian Canal Commission, the total number of deaths in Panama and Colon during 1911 was 1,456 and 527, respectively. In the quarantine service the number of men inspected at Panama and Colon in the crews of vessels was 103,520 and the number of passengers inspected 62,296. Cabin passengers landed from foreign ports in 1911 numbered 19,606, while 19,544 embarked for foreign ports. Arrivals of steerage passengers numbered 21,520 and departures 17,272.

Telegraph Changes—Parcel Post and Credit Terms.

There were few changes or additions to the telegraph lines in 1911, all energy being directed toward the improvement of existing lines, most of which have been overhauled and put in good condition. The old No. 9 galvanized-iron wire is fast being replaced by No. 10 copper wire, and 600 iron poles have been substituted for the old wooden poles. A bank of 60 storage cells with mercury arc rectifying outfit has been substituted for the old gravity battery of 250 cells in the main office at Panama and is showing its efficiency in better and superior work and greater economy. The tower and instruments for a wireless station in Panama were ordered last December, but work was stopped until further notice at the request of the American Government.

The fees charged for the certification of invoices of merchandise sent from the United States were reduced from \$3 to \$1.

Features which may affect trade to some extent are the absence of a parcel post, making it necessary for people to rely on the express companies for the shipment of small packages, and the limited credit terms as compared with other Latin-American countries. Usual terms are from 30 to 60 days, and on rare occasions these are extended to 120 or 180 days. Before giving credit firms usually apply to banks for information, which is given freely without responsibility on the part of the bank. Little credit is given direct to importers by manufacturers, the latter as a rule getting orders from commission houses.

Industries of Panama—Encouragement of Agriculture.

The cattle and tobacco industries of Panama remain about as in recent years. The banana industry of the United Fruit Co. in the Bocas del Toro district continues to flourish and grow. Several American and other foreign companies are pushing the development of the lumber and rubber resources of their various properties and several shipments of lumber have been made in preparation for more active development in the near future if all goes well. The future of the coconut industry seems bright, and, while the Atlantic coast is probably best at present for this industry, several parties on both coasts are planting large areas. Most of the shipments are now sent by the San Blas Indians.

Good sugar cane is grown in some parts of Panama and the Government seems inclined to aid this industry. The known part of the country is rich in ivory nuts, rubber, hardwoods, and all tropical and some temperate products, and some believe that the unknown regions of the Darien to the south are richer still in agricultural and mineral wealth. The drawbacks to the proper agricultural development are many and the imperative need for agricultural improvement and the opening up of inland communication is recognized. Land titles are badly mixed and extreme care must be exercised by investors in real estate. The Government is encouraging colonization, and one American has entered into a contract to establish a colony of at least 100 families in the next seven years on a tract of 12,500 hectares (30,888 acres), an equal area to be granted to the promoter of the project at the end of seven years or sooner if the 100 families are settled.

Mining—New Laws, Automobiles, etc.—Shipping Record.

Little advance was made in mining in 1911, the only mine in active operation being the Darien Gold Mining Co. Altogether 169 mines, including gold, silver, copper, sulphur, asbestos, iron, and lime mines, have been denounced in the Republic.

Laws were passed in 1911 establishing a school of telegraphy, prohibiting gambling, and regulating automobile traffic. There are about 50 automobiles in this city, all of American make. A tax of \$4 a month is levied on those used for pleasure and of \$7.50 on those used for commercial purposes. The field is limited both by the low purchasing capacity of the people and by lack of roads suitable for motoring.

Both the Panama-David Railway project and the Dziuk concession in the south came to an end in 1911, the former through the President's veto and the latter through the Government's declaring the concession forfeited because of failure to comply with terms. There is a small railroad at Bocas del Toro owned and operated by the United Fruit Co., but the only road of any importance in the country is the Panama Railroad.

No ocean-going vessels entered or cleared at the port of Panama proper in 1911, the whole trade being made up of the small steamers of the National Navigation Co. and of sailing vessels. The Pacific coast shipping calling at Panama included the following: Eight small steamers of 859 tons, 24 gasoline launches of 77 tons, 43 schooners of 1,161 tons, 35 sloops of 198 tons, and about 610 boats of various grades from fruit boats to dugouts. During the year the United Fruit Co. further improved its service to Colon and contemplates

shortly increasing its service to New Orleans. It is also said that the Pacific Steam Navigation Co., now incorporated with the Royal Mail, intends shortly to extend its Liverpool-Callao mail service to Panama and in view of the near completion of the canal make Balboa its Pacific terminus.

COLON.

[From Consul James C. Kellogg.]

The principal articles entering into the import trade of Colon and the principal countries from which they came in 1911 were as follows:

Articles.	United States.	United Kingdom.	Germany.	France.	Spain.
Beer.....	\$95,152	\$23,157	\$11,774		
Dry goods, boots, shoes, etc.....	801,998	362,396	102,678	\$18,962	\$25,370
Drugs.....	28,533	11,802	4,401	1,224	
Furniture.....	50,759	4,227	5,715	960	
Hardware.....	63,138	28,283	12,103		
Kerosene.....	16,918				
Liquors.....	43,538	12,947	13,390	67,430	37,447
Lumber.....	115,406				
Provisions.....	\$71,211	77,296	118,459	4,763	3,044
Tobacco and cigars.....	59,891	5,708	4,005		140
Other articles.....	81,245	33,736	7,096	3,639	
Total.....	1,678,089	559,352	280,221	96,978	66,001

Declared Exports to United States.

The value of the declared exports to the United States from Colon and Bocas del Toro in 1911, exclusive of returned American goods which amounted to \$13,826 at the former place and \$23,272 at the latter, was as follows:

Articles.	Value.	Articles.	Value.
COLON.		BOCAS DEL TORO.	
Balata.....	\$5,876	Bananas.....	\$2,146,396
Coconuts.....	62,049	Chocolate.....	31
Hides.....	8,319	Coconuts.....	12,081
Horns.....	42	Household effects.....	165
Hats.....	481	Orchids.....	272
Ivory nuts.....	56,985	Rubber.....	338
Rubber.....	524	Turtles, live green.....	2,096
Turtle shell.....	3,830	Turtle skin.....	142
Other articles.....	117	Turtle shell.....	911
Total.....	138,223	Wood, red mangrove.....	47
		Total.....	2,162,461

The principal declared exports from Colon in 1910 were: Coconuts, \$89,004; hides, \$11,606; ivory nuts, \$57,075; and turtle shell, \$28,597. The total value was \$210,054.

Shipping Record—Business of Colon Declining.

The number of ships entering the port of Colon in 1911 was 579, of 1,775,226 tons, as compared with 406 of 1,141,100 tons in 1910. The arrivals by nationality were as follows: American, 10 vessels of 27,885 tons; British, 285 vessels of 813,378 tons; German, 161 vessels of 436,572 tons; Norwegian, 76 vessels of 168,036 tons; French, 24 vessels of 61,680 tons; Spanish, 12 vessels of 37,084 tons; and Italian, 11 vessels of 447 tons.

The neighboring port of Cristobal, Canal Zone, continues to receive nearly all the cargo steamers arriving with merchandise for

the Isthmian Canal Commission, as well as the steamers of the Panama Railroad Co., which formerly entered at this port. This has decreased materially the number of vessels and the tonnage arriving at Colon. Vessels entering at the Colon customhouse, discharging cargo, and then leaving for Cristobal have to clear in the same manner as if going to a foreign port.

Of the 313 vessels entering and leaving the port of Balboa last, 123 were American.

Although the value of the imports at Colon showed an increase over 1910 because of the heavy purchases before the tariff increase went into effect, business in Colon is getting worse and worse. During 1911, 11 firms went out of business, and there are others remaining only because they can not dispose of their stock, and still others hanging on in the hope that things will improve. The Colon Board of Commerce in December, 1911, delegated its secretary to appear before the Committee on Interstate and Foreign Commerce of the United States House of Representatives, in session at Ancon, to discuss some matters of interest to the business men of the Isthmus, especially Colon. Among other things the secretary called attention to the different kinds of mercantile enterprises engaged in by the United States Government on the Isthmus.

FIRE AND LIFE INSURANCE IN CANADA.

[From Consular Agent Sydney F. Culver, Fredericton, New Brunswick.]

The fire losses paid out by the various insurance companies in 1911 totaled \$10,937,159, an increase of \$644,766 as compared with 1910, according to the annual report of the insurance branch of the Dominion Finance Department.

The net cash received in premiums was \$20,572,182, a gain of nearly \$2,000,000, and the gross amount of risk at the end of the year was \$2,277,968,950, an increase of a little over \$243,000,000. British companies are apparently capturing most of the new business. During the year they increased their total amount of risks by \$177,000,000 as compared with an increase of \$46,000,000 by the Canadian companies and \$71,000,000 by the American companies. The total fire loss last year was the largest since 1904, when the companies paid out a total of \$14,099,534.

Life insurance business showed a rapid growth during the year. The premiums totaled \$31,619,626, an increase of \$1,847,723 over 1910, while the amount paid out in claims aggregated \$11,043,274, an advance of only \$146,804. The total amount of life insurance in force at the end of 1911 was \$950,413,633 on 1,335,047 policies. The increase in the amount in force during the year was \$94,300,274, the new policies numbering 162,922.

Cement Shortage in Alberta Province.

The Canadian press prints a dispatch from Edmonton, stating: "Citizens of this city claim they are suffering a loss of \$5,000 per day due to cement shortage."

A mail tube line, 7½ feet in diameter, is to be constructed in London by the British Post Office. Each vehicle will be operated by an individual electric motor.

INCREASING USE OF ANILINE DYES IN RUG MAKING.

[From Consul W. W. Masterson, Harput, Turkey.]

Within the past few years vegetable dyes, generally of local manufacture, have been superseded to a great extent by the introduction into Turkey of coal-tar and aniline preparations.

In the old days the art of preparing vegetable dyes and of dyeing was followed by many people of this country, the secrets of the trade being handed down for generations. Those engaged in this trade occupied an enviable position in the villages and lived far better than the mechanics and tradespeople of the place. In those times every rug-weaving establishment had a dyer permanently employed whose only work was the preparation of vegetable dyes and the dyeing of the different colored wools. Indigo then formed a considerable item of import from India, for this color was the base of many of the different shades of blues, and nearly every shop-keeper in the market kept, as staples, some of the commoner vegetable coloring preparations.

Within the last few years there has been an almost complete transformation and a substitution of coal-tar and aniline preparations for these vegetable dyes. Most kelims and the cheaper rugs of all kinds now found in the markets show that their colors are not obtained by the old methods. The extent of this substitution is made clear by the import statistics of Harput. In 1906 there was no mention of the importation of aniline preparations in the annual trade returns, while for the year 1911 those preparations, under the heads of alizarin and aniline, were imported into this city to the value of \$18,500 and receipts of indigo shrunk to the insignificant figure of \$1,800.

Detection Easy—Aniline Dyes Cheaper.

Fortunately, however, these aniline dyes can be detected in rugs with comparative ease. The colors are always bright and very pronounced and generally, on the application of a little moisture on a rag, will rub off; or by placing a rug in the sunlight for a few days the colors will fade quite decidedly. On the contrary, vegetable coloring is generally not so pronounced in tone, will not fade either in washing or in the sunlight, and will grow softer, richer, and glossier with the passing years.

The principal and about the only reason for this substitution is the cheapness of the aniline colorings in comparison with the time and labor spent in procuring the vegetable dyes. Hunting for some of the roots and herbs, boiling, and blending, all take time and labor and add to the expense of the vegetable dyes. Again, with the continued growth of the weaving industry throughout the country the need for dyes became so great that the production of the vegetable dyes in the slow expensive methods was not sufficient, and to meet this demand the introduction of aniline coloring matter was brought about. Aniline dyes are imported exclusively from Germany, and the trade has now grown to such importance that a traveling agent makes an annual tour throughout the interior of Turkey.

[The use of vegetable dyes in rug making is noted in the following articles which were published in Daily Consular and Trade Reports

on the dates indicated: Rug making in India, by Consul General William H. Michael, Calcutta, July 23, 1908; Rugs from the Orient, Consul Frederick Simpich, Bagdad, May 28, 1910; Vegetable dyes best for oriental rugs, Consul General Michael, Nov. 18, 1910.]

LONDON STREET NAME PLATES.

[From the London Times.]

The present great diversity of the street name plates in London was discussed at a conference just held at the Royal Institute of British Architects. Members of borough councils in nearly every part of London attended, and there was a free interchange of views with the architects present. It was generally agreed that some uniformity of treatment is desirable. Some of the London street name plates are cast iron, many are enameled iron, others are of zinc or tile; but the most common system of all, and the most objectionable in the view of the institute, is to paint the name of the street on the bricks of the house. It is quite a frequent occurrence, as was mentioned at the conference, for the painter, when the name fades, to paint out the old name and then put in wrong spelling.

The type of plate most generally favored was one of plain cast iron, with raised letters in old roman type. The suggestion was also made, and met with considerable approval, that a competition should be promoted for a design for a good, efficient name plate for uniform use. Neither of these two proposals was definitely adopted, but the representatives of the municipalities agreed to report to their councils and to meet the institute again. Many of the delegates were afraid of involving their councils in heavy expense, but, as far as the members of the institute are concerned, they do not advocate an ornate or elaborate name plate; their view is that, if it is simple and thoroughly efficient for its purpose, it will be sufficiently artistic.

Another suggestion which was mooted at the conference was the desirability of a more general display of street name plates. Most people who have visited Paris have admired the thoroughness of the system by which the names of the streets are exhibited on plates of uniform design at every corner of every street and of the intersection of streets. This suggestion, however, met with a colder reception than the first, and the representatives of some of the poorer boroughs intimated that the cost entailed was more than their councils would be likely to contemplate.

ARTIFICIAL-RUBBER FACTORY IN HOLLAND.

[Dutch press statement forwarded by Consul Frank W. Mahin, Amsterdam.]

A factory to produce artificial rubber has been established at Ymuiden, the port at the mouth of the North Sea Canal. It is said that the company instituting this factory has succeeded in producing a substance having the qualities of rubber and also certain special advantages over genuine rubber.

The process is a secret, but the principal ingredient of the product is said to be fresh sea fish, which are brought to Ymuiden in vast quantities by the Dutch fishing fleets. According to report 15 to 16 per cent of natural rubber is added to the fish, and the result is a substance as flexible and elastic as rubber, but much cheaper—about as 1.25 to 8 in price, compared with real rubber. The low price of this product will be caused partly by the by-products which are possible, for it is said that much albumin will be made from the fish and that half of the factory is arranged for the manufacture of guano.

It is stated that this artificial rubber can be vulcanized in a short time; that it is benzene-proof and can resist the effect of heat. At first sight the substance much resembles real rubber. A slightly fishy smell betrays the chief ingredient, but it is explained that this will be prevented by extracting the fat of the fish.

Sunday Halifax-Montreal trains.—Vice-Consul General W. Porter Boyd, of Halifax, reports that, through a change in the time-tables of the Intercolonial Railway, effective the first part of June, a Sunday service of trains to and from Montreal has been instituted and that there will, accordingly, be train connection between these two Canadian cities seven instead of six days each week.

GERMAN EMPEROR'S PRIZE FOR AEROPLANE MOTORS.

[From Consular Assistant Louis G. Dreyfus, jr., Berlin.]

In order to stimulate interest in aviation 50,000 marks (\$11,900) are offered as a prize by the German Emperor to the manufacturer of the best motor for aeroplanes constructed by a German manufacturer. The contest to determine the merits of the various motors will be held on October 1, 1912. A committee of 16, consisting of prominent officials of the Department of the Interior, the Ministries of Marine and of War, the Ministry of Education, the technical schools, the automobile and aero clubs, was appointed to manage the competition. The trials will be held at Adlershof, in the vicinity of Berlin, and must be completed before January 15, 1913. The committee of award consists of 7 members, all professors in the leading scientific schools of Germany.

Competing motors must (1) be manufactured by German manufacturers without the use of parts made abroad; (2) must be of at least 50 and not over 115 horsepower; (3) must be arranged for the propulsion of a propeller which in a 50-horsepower motor must not make more than 1,450 revolutions a minute, and in a 115-horsepower motor not more than 1,350 revolutions; (4) must not weigh more than 6 kilos (13.2 pounds) per horsepower, and furthermore, aluminum and aluminum alloys must not be used in the construction of the piston and the driving rod. Every competitor can enter motors of different kinds, but a difference of 15 per cent in the number of revolutions is not to be considered as a sign of difference. A similar motor can be entered, however, if duly registered as a replace motor.

Entries can be made to the committee up to July 1, 1912, on blanks, to which the affirmation of the applicant must be attached, that the motor is made in a German factory, that no parts of foreign manufacture are used, that he subjects himself to the final decision of the jury, that no suit for damages will be instituted even in case the motor is damaged. A full description of the motor as well as a drawing must be furnished. A deposit of 500 marks (\$119) must be made to cover the trial expenses. All motors which are to compete must be delivered at the testing grounds by October 25, 1912. For the test a benzine weighing about 0.72 kilo (1.587 pounds) per liter (1.05 quarts) will be supplied and only such benzine can be used.

In addition to the Emperor's prize of 50,000 marks (\$11,900), a second prize of 30,000 marks (\$7,140) is offered by the Imperial Chancellor, a third prize of 25,000 marks (\$5,950) by the Minister of War, and a fourth prize of 10,000 marks (\$2,380) by the Minister of Marine.

National Aeroplane Subscription.

As a further evidence of this great movement for the extension of German aviation, a proclamation has been posted in most of the banks and prominent business houses throughout the Empire saying that subscriptions are being taken for a national aeroplane subscription. This proclamation is signed by Prince Henry of Prussia, brother of the Emperor, as well as by other well-known subjects. Gala performances are being given at some of the theaters, the proceeds of which are destined to swell the national fund.

Iron ore imported into Germany during the first three months of 1912 weighed 4,416,900 metric tons, against 3,429,300 and 2,203,100 tons in the respective periods of the two previous years.

SPEED OF TRAINS IN GERMANY.

[From Consul George Nicholas Ifft, Nuremberg.]

The speed of German passenger trains, even of the express trains, is not usually remarkable. The so-called "Schnellzuege" and "Eilzuege" ("fast" trains and "hurry" trains), for the first of which an extra charge is made, are both ordinarily deliberate in their movements, and accommodation trains and "locals" often spend much time between stations, usually in sight of each other.

However, German trains usually run on schedule time. The new summer time-table for the German State Railways Systems, just issued, shows some advances in speed, principally, of course, for through trains. The fastest train in Germany is the so-called "D-Zug 20" between Berlin and Hamburg, which maintains an average speed of 55.177 miles per hour. This throws into second place the express from Munich to Nuremberg (leaving Munich at 8.15 a. m.), which heretofore has been the fastest train in Germany with an average speed of 54.991 miles per hour. In the third place is an express train from Berlin to Halle with an average speed of 54.929 miles per hour, and the fourth place is held by the express from Freiburg to Appenweier, in Baden, with an average speed of 52.941 miles per hour.

The best German trains frequently cover long distances without stop and at high rate of speed. The record in this particular is held by the Munich-Berlin express for the run between Nuremberg and Halle, a distance of 195.11 miles, which is covered without stop at an average speed of 43.19 miles per hour, in spite of the heavy grades in crossing the Thuringian Mountains. Other long runs without stop are Berlin to Hamburg, 178.33 miles, at an average speed of 55.18 miles per hour; Munich to Wurzburg, 172.12 miles, at 50.33 miles per hour; Berlin to Hanover, 157.83 miles, at 50.39 miles per hour; Schneidemuehl to Berlin, 153.48 miles, at 50.46 miles per hour; and Breslau to Frankfort on the Oder, 154.10 miles, at 50.77 miles per hour.

The fastest long-distance trains in Germany are the Berlin-Hanover-Dortmund express, which covers 292.04 miles with but three stops, at an average speed of 50.52 miles per hour; the Oderberg-Breslau-Berlin express, 316.90 miles with four stops, at 50.14 miles per hour; the Berlin-Konigsberg express, 366.61 miles with three stops, at 49.70 miles per hour; the Munich-Berlin express, 419.42 miles with two stops, at 48.78 miles per hour; the Berlin-Frankfort on the Main express, 334.92 miles with five stops, at 48.50 miles per hour; the Munich-Wurzburg-Frankfort on the Main express, 256 miles with four stops, at 47.04 miles per hour; the Berlin-Hof-Munich express, 407 miles with four stops, at 44.93 miles per hour.

Railway Construction in Turkey.

A Reuter dispatch from Constantinople states that the Turkish Chamber on May 25 approved a convention with the Oriental Railway Co. for constructing a railway from Uskub via Kalkandele to Gostivar, about 39 miles.

Pineapple packing in Hawaii commenced at the end of May. One firm expects to put up 450,000 cases and another 330,000 cases. The pack in 1914 is expected to be 1,500,000 cases.

FAR EASTERN TRADE NOTES.

[From Consul General George E. Anderson, Hongkong.]

Rattan Trade—Siamese Cotton.

The Philippine Government is attempting to foster the production and export of rattan. Apparently there is no reason why this can not be greatly increased. The Far Eastern trade in this commodity is large, and Hongkong's output of rattan furniture is shipped all over the world. However, practically all the raw material is imported from Indo-China and the Malay States. Any increased output of the Philippines in rattan would find a market in the Far East, if not in the United States, where the use of rattan is increasing, as is shown by increasing exports of rattan thereto from Hongkong. [American imports of rattan were valued at \$884,626 in the fiscal year 1910 and at \$925,269 in 1911. This does not include rattan furniture.—B. of M.]

The scheme inaugurated something over a year ago to raise cotton on a large scale in Siam to supply Japanese cotton mills is reported as having failed of success for the time being at least. The fact that the cotton market is monopolized by Chinese middlemen is given as one reason for failure.

Heavy Traffic—Clothing Sales.

Space on all trans-Pacific vessels from the Puget Sound district is becoming difficult to obtain, and the mass of freight moving for Hongkong and other Far Eastern points seems to be the largest in history. Freight for United States and Canada continues in large volume in spite of disturbed conditions in South China.

Motor-boat traffic on the West River is reported as exceptionally active. The Chinese Government is arranging for an additional service of such vessels between Nanning and Lungchow and Poseh.

A Japanese hat and cap manufacturer, after a trip through the Yangtze Valley, reports that of the foreign headwear now sold to the Chinese about 70 per cent is of Japanese make, the other 30 per cent being British and German.

A traveling salesman of an English firm is said to have recently sold about \$125,000 worth of ready-made foreign clothing in Manchuria, mostly at Harbin, for sale to Chinese. In practically all parts of China native and other tailors have orders for such clothing which will keep them busy for months.

[From Consul Albert W. Pontius, Dairen.]

Exports of Salt to Chosen.

Owing to a dearth of fuel in the salt-manufacturing districts of Chosen (Korea) the cost of fuel in producing 100 kin (132 pounds) of salt has risen to 40 cents, leaving only about 20 cents for labor and other expenses. Salt produced in the Leased Territory of Manchuria, on the other hand, can be sold for 25 cents per 100 kin, and there are consequently prospects of a good export trade to Chosen. The Government of Chosen exercises a monopoly in the salt industry, but can supply under ordinary circumstances only 20,000,000 kin of the 360,000,000 kin consumed there annually. The salt output of the Leased Territory is about 150,000,000 kin annually of which 45,000,000 kin are shipped to Japan, leaving only 105,000,000 kin available for possible export to Chosen.

Dairen Exports.

Returns just issued by the South Manchuria Railway Co. wharf office show that exports from Dairen in the six months ended March 31, 1912, exclusive of Fushun coal, amounted to 486,885 tons, a decrease of 74,335 tons compared with the corresponding period of the previous year. They were composed of beans, 125,688 tons; bean cake, 273,311 tons; cereals, 14,169 tons; seeds, 15,535 tons; oils, 24,910 tons; and sundries, 33,272 tons. Most of the oil is bean oil and the life of the export trade is thus shown to depend on the bean crop. Japanese firms have an easy monopoly of this trade and can sell bean cake at Japanese ports and beans in European markets at c. i. f. prices which are as low or lower than the f. o. b. Dairen prices of local European firms. None of the local foreign firms has shipped any considerable bean cargo to European ports during the past season.

[From Consul General Thomas Saminons, Yokohama.]

Japan's Rapidly Increasing Silk Industry.

The silk industry of Japan has increased in 10 years from approximately \$37,000,000 to \$65,000,000. This is particularly gratifying to the Japanese, when it is known that the raw-silk production of China, Italy, Persia, Turkestan, and other parts of the world have made but slight increases. The chief effort of the Japanese authorities is now being directed to the improvement of the quality of the raw-silk production of the country.

DOMINANCE OF BRITISH SHIPPING.

In an article entitled "Thirty years of British shipping" the London Economist prints the following table of the tonnage owned by the United Kingdom, its colonies and dependencies, and by foreign countries.

Year.	United Kingdom.	British colonies and dependencies.	Foreign countries.	Total.	Percentage of British.
1850.....	3,565,133	667,829	4,938,256	9,171,218	38.9
1870.....	5,690,789	1,458,345	9,962,533	17,111,667	35.6
1890.....	7,978,538	1,709,550	11,786,621	21,474,709	37.2
1900.....	9,304,108	1,447,284	15,459,016	26,211,308	35.6
1910.....	11,556,663	1,906,325	20,162,567	33,525,555	34.3

In explanation the Economist states:

The figures for foreign countries are incomplete for the years 1850 and 1870, and the totals given above are considerably lower than they should be. Hence the proportion of British tonnage appears to be higher than it actually was. The total tonnage registered under the United States flag can be divided into two parts, that used for foreign trade and that used on the Great Lakes. In 1850 the United States had 1,585,711 tons of shipping registered for foreign trade and 1,899,555 tons for the Lakes; in 1910 the foreign-trade figures had shrunk to 791,825 tons, while the Great Lakes tonnage had risen to 6,716,257.

A fruit-preserving industry established at Kingston-on-Thames, England, 15 years ago, has developed to such an extent that a new factory covering nearly 2 acres is being erected and will be completed in time for the coming fruit season. It will be the largest factory of the kind in the vicinity of London.

BRITISH DEVELOPMENT OF AFRICA.

[From the London Times.]

Northern Nigeria.

The industrial progress of the colony during the 12 months has been substantial. The completion of the Lagos Railway (northern extension) to Zungeru, the administrative capital, was effected in January, 1912. Thereby the period of the journey to England is reduced by eight days. Great progress has been made in railway construction in other particulars. On the Baro-Kano Railway the line between Zaria and Kano was opened to passenger traffic in November and is now in regular use. The Bauchi Light Railway has been completed to Rahamma, 90 miles east of Zaria. This will facilitate the export of tin from the Bauchi mining districts. A considerable amount of prospecting for tin has been in progress throughout the year, and discoveries of lodes have been reported. In January, 1912, the discovery of rich monazitic concentrates was reported, samples of which have been sent to England for appraisement.

Southern Nigeria.

There has been a phenomenally rapid increase in the trade and revenue of the colony. The returns for 1911 showed a gross trade exceeding \$55,000,000 with a revenue approximately \$10,000,000. A census of Southern Nigeria shows an estimated population of 7,858,689.

The completion of the Lagos-Minna-Kano Railway connects Northern Nigeria by rail with the seaboard. In 1903, two years after the opening to Ibadan, the gross revenue of the railway was only \$250,000, while this year there is little doubt that the receipts will exceed \$1,500,000, and for next year they are estimated at \$1,750,000. The extraordinary traffic development realized on the Lagos line is due to the fact that it passes through the oil-palm belt up to Ikirun at 200 miles from the coast, and the Lagos line can not fail to benefit from the exploitation of the Bauchi tin field. The deepening of the Lagos bar by dredges is progressing, and extensive harbor improvements are in progress. These works will enable Lagos to become an open port for most ocean-trading steamers.

Extensive coal deposits have been discovered at Udi. The tests carried out by the Government and the analyses at the Imperial Institute have given results equal to two-thirds that of the best Welsh coal. The survey for a railway to connect this coal field with the river port of Onitsha is being carried out. The importance of this line, as affording cheap fuel to the two Nigerias, would be very great, while it would make for the development of the trade of this rich district and the settlement of intertribal disputes among the natives of the hinterland. The lignite deposits to the west of the Niger are also very valuable; and those at Okpanam vary from 15 to 20 feet in thickness.

The Gold Coast.

A number of public works of considerable magnitude are in hand in the colony, good progress on which has been made during the year. The most important of these are the Accra harbor works, estimated to cost \$850,000; the Sekondi harbor works, \$900,000; the Accra waterworks, \$1,000,000; the Sekondi waterworks, \$900,000; and the Kumasi-Ejura road, \$425,000. In addition, a regular service of passenger trains has been inaugurated on the Accra-Akwapim Governmental Railway. In other ways, too, the colony has made substantial progress. The value of the cocoa exported practically doubled from 1910 to 1911, rising from \$4,300,000 to \$8,000,000, and there was a \$1,000,000 increase in the export of gold.

Among the more important legislative enactments of the year were an act making provision for the formation of forest reserves, and one providing for the organized destruction of mosquito larvæ, a measure which, if successfully enforced, should materially benefit the health of the colony.

East Africa Protectorate.

The general progress in British East Africa during the year has been very satisfactory. Trade and revenue have increased, and there has been a rise in the price of land. The most important individual work of the year has been the commencement of the Magadi Railway; but other projects for the development of the Protectorate on which work has been begun, under the loan of \$1,200,000, are the Thika Railway, the Mom-basa water supply, and the Kilindini deep-sea pier. A very successful agricultural show was held at Nakuru.

British Nyasaland.

The year 1912 opened with the further welcome news that the Imperial Government has successfully arranged for the extension of the existing line of railway from Blantyre to Port Herald southward to the Zambesi and thence to Beira. Nyasaland will

eventually be linked up to the coast by a continuous line of railway, and there is little doubt that the line to Beira will result in the rapid development of the country. Trade returns already indicate a healthy outlook for the future.

Uganda.

The rapidity of the industrial growth of Uganda is emphasized by the fact that in the year ended November 30, 1911, the exports from the Protectorate showed a net increase over the previous year of \$336,000. The output of cotton, which was 858 hundredweight (hundredweight=112 pounds), valued at \$5,230, four years ago reached 83,000 hundredweight, valued at \$800,000, in the year 1910-11, and a further large increase in the current year is confidently anticipated, a larger area being under cultivation. The entire cotton crop of the Protectorate, it should be noted, is produced by natives.

On January 1, 1912, the Busoga Railway was opened, the first railway in Uganda, connecting Jinja, the headquarters of the Eastern Province, in the Ripon Falls, the source of the Nile, with a point 58 miles down the river, Namasagali, where the Nile first becomes navigable for steamers. The line should be of great benefit.

The Bechuanaland Protectorate.

On February 29, 1912, the dam, estimated to contain 45,000,000 gallons of water, constructed by the Rhodesian Railways (Ltd.) on the Metsimashwane River, was formally opened in the presence of a gathering which comprised most of the leading Europeans of the Protectorate.

JAPANESE WANT COAL DEPOT IN HAWAII.

[From Honolulu Bulletin.]

That a large supply of Japanese coal may be deposited at Honolulu soon, presumably as a commercial venture, is indicated by inquiries now being made here by H. Yokatake, representing the great Japanese coal merchants Mitsui & Co. Mr. Yokatake has been prospecting along the water front for a possible site for a coal depot, together with landing rights and facilities for such colliers as might be used to keep the local pile up to full strength.

Mr. Yokatake called at the naval station and held a conference with the commandant as to the possibility of selling Japanese coal to the Navy. Admiral Cowles informed him that all the Navy coal was shipped here by the department direct and that no local purchasing was done. However, Mr. Yokatake put in some of his time looking over the land proposition, "just in case my company might want to locate a branch here," as he expressed it. He made particular inquiries as to when the Navy was to move its establishment to Pearl Harbor, and if there was any chance of a commercial concern securing the present naval wharves.

The only user of Japanese coal here at present is the Army, the transports burning this grade of fuel. The Army pile is supplied by the animal transport *Dix*, purchases being made in Japan. The *Dix* is to bring 9,000 tons in the near future, to replenish the Army pile, which is now very low.

EXTENDING DOMINION TRADE SERVICE.

[Canadian press announcement from Ottawa.]

Negotiations have been opened by the Canadian Government, acting through the Trade and Commerce Department, with the Imperial Government in England with a view to having the British consular service cooperate with Canadian officials in extending the trade of Canada. This important step is part of the program mapped out by Hon. Geo. E. Foster, for the complete reorganization of the external trade service of Canada. There is to be in future a far more strict and efficient supervision of trade agencies from Ottawa. Mr. Richard Grigg, the new commissioner of commerce, will have oversight of the whole trade service, and the collection and publication of statistics and information on trade matters. In this connection the cooperation of boards of trade is to be sought and their experience turned to account.

Mexican oil shipments.—Consul Clarence A. Miller reports that the crude oil shipments from the Mexican port of Tampico to ports in the United States (including one shipment to Porto Rico) amounted to 1,118,547 barrels in the first quarter of 1912, in contrast to a total of 806,916 barrels during the entire calendar year 1911.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9027. Concrete freight pier and sea wall.**—An American consular officer reports that a foreign Government is prepared to receive tenders from engineers and contractors, experts in reinforced concrete work, for the construction of a ferro-concrete freight pier and sea wall in a certain harbor. The drawings and specifications may be inspected at the office of a firm in the United States, whose address can be obtained from the Bureau of Manufactures. Tenders can also be filed there up to August 31, 1912.
- No. 9028. Telephone equipment.**—A telephone company in a foreign country has under construction a public telephone line which will be completed in the near future. Another telephone company in the same country has decided to install a modern telephone exchange for general and exchange business, while a number of extensions will be made by both companies. The names of these companies, together with further details furnished by an American consulate, will be sent to interested firms by the Bureau of Manufactures.
- No. 9029. Woodworking machinery.**—A business man in a European country informs an American consulate that he wishes to be placed in communication with American manufacturers of woodworking machinery, especially machinery used for making from hardwood the so-called D handles for shovels. Terms and discounts should be quoted, and full descriptions should be given in German.
- No. 9030. Coal and lumber.**—An American consul in the Levant furnishes the name of an important commission house in a large city that wishes to enter into relations with American exporters of coal and of lumber (including doors, sash, blinds, and building material). This firm has been established in business for many years and has a good reputation.
- No. 9031. Textiles, leather, skins, and military furnishings.**—A report from an American consular officer in the Near East states that an important commission house in a large city desires to enter into relations with American exporters in all branches of the textile trade, leather and skins, and general military furnishings. This is a long-established firm and enjoys a good reputation.
- No. 9032. Machinery of various kinds.**—An enterprise, controlled by certain business men in a foreign country, has extensive banana plantations and desires to purchase and install machinery for cutting (slicing) and drying bananas, and ultimately grinding the desiccated product into banana flour for export. The company believes that there is special machinery for this purpose offered for sale in the American market. It estimates that it would have 400 to 500 tons of bananas to handle and turn into flour. Hand-power machinery, as well as that controlled by light portable motors (electric or gasoline), might suit the purpose better than steam machinery. The firm would also be interested in receiving from the United States catalogues and specifications of machinery for sorting, cleaning, etc., of coffee and cacao.
- No. 9033. Shoes.**—The manager of a foreign business firm informs an American consular officer that he wishes to start in business for himself. He therefore asks that catalogues be sent him, together with price and discount lists, of American shoes (men's and women's). The article desired should be attractive in appearance and should sell at wholesale prices at not more than \$2 to \$2.50. Fancy and "extreme" types of shoes might also find favor in the country in question.
- No. 9034. Railway ties and timber.**—An American consular officer reports that a railway company in his district is in the market for 15,000 railway ties of standard width and 3,100 pieces of timber suitable for ties, but of double length. Specifications and other particulars can be obtained from a person named in the report. Correspondence may be in English.
- No. 9035. Hand looms.**—A business man in a Mediterranean country desires to communicate with American exporters of hand looms. He has corresponded with French manufacturers, but informs an American consul that he will await the arrival of American catalogues before ordering. American shippers should hurry catalogues, price lists, and other particulars if they wish to secure the orders. Write in Italian, and if possible quote prices c. i. f. point of destination. All possible information should be sent by the first mail.

DAILY CONSULAR AND TRADE REPORTS

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REVIEW OF GERMAN TRADE AND INDUSTRIES.

[By Consul General A. M. Thackara, Berlin, supplementary to a preliminary report published Feb. 29.]

The improvement shown in the industrial, financial, and commercial conditions of Germany in 1910 continued during 1911. Notwithstanding the disturbed condition of Germany's foreign affairs in the second half of last year, and the shortness of the fodder crops, considerable activity was displayed in almost every branch of commerce and industry.

The favorable situation was reflected in the foreign trade; the increased production and consumption of coal, iron, and steel; the increased receipts from passenger and freight traffic of the railways and the ocean steamship companies; the satisfactory condition of the labor market; the larger receipts from taxation; the stability of the official rate of discount; and the satisfactory balance sheets shown by the financial institutions.

Increased Foreign Trade.

The value of Germany's total foreign trade in 1911, according to advance statistics recently published in the Imperial Gazette, giving the corrected values of the imports and exports by countries, was \$4,338,044,802, an increase of \$302,947,582, or 7.5 per cent, over the previous year. The value of the imports, including precious metals, was \$2,381,461,082, compared with \$2,215,778,096 in 1910, and the exports, also including precious metals, \$1,956,582,768, against \$1,819,319,124 in 1910.

The imports of precious metals in 1911 were valued at \$71,704,640, compared with \$89,456,108 in 1910, and the exports \$28,163,730 and \$40,349,806 for the two years, respectively. The imports without precious metals in 1911 amounted to \$2,309,756,442 and the exports \$1,928,419,038, while in 1910 the values without precious metals were \$2,126,321,988 and \$1,778,969,318, respectively. From the foregoing figures it will be seen that there was a much larger increase in the foreign trade than indicated in the preliminary report printed in the Daily Consular and Trade Reports for February 29.

Imports and Exports by Countries,

The value of imports into and the exports out of Germany, by countries, for the past two years, precious metals not included, was as follows, in round figures:

Countries.	Imports from—		Exports to—	
	1910	1911	1910	1911
United States.....	\$282,600,000	\$319,800,000	\$150,600,000	\$152,300,000
Argentina.....	85,000,000	88,000,000	57,200,000	60,900,000
Australia.....	67,000,000	60,200,000	15,100,000	19,000,000
Austria-Hungary.....	180,700,000	175,900,000	195,500,000	218,400,000
Belgium.....	77,500,000	80,900,000	93,000,000	98,200,000
Bolivia.....	7,000,000	8,700,000		
Brazil.....	66,400,000	76,200,000	29,000,000	36,200,000
British India.....	96,200,000	104,800,000	21,400,000	23,700,000
British South Africa.....	14,100,000	13,300,000	12,900,000	11,300,000
British West Africa.....	25,800,000	25,400,000	3,600,000	(1)
Canada.....	(1)	(1)	8,700,000	10,200,000
Ceylon.....	8,400,000	8,800,000	(1)	(1)
Chile.....	36,800,000	37,700,000	15,400,000	20,300,000
China.....	22,500,000	24,600,000	15,800,000	17,100,000
Cuba.....	(1)	(1)	5,300,000	6,200,000
Denmark.....	37,600,000	42,900,000	53,500,000	51,800,000
Dutch East Indies.....	44,600,000	43,900,000	11,900,000	14,600,000
Egypt.....	22,300,000	23,700,000	8,100,000	10,100,000
France.....	121,100,000	124,600,000	129,300,000	142,500,000
Italy.....	65,300,000	67,800,000	77,000,000	82,800,000
Japan.....	8,800,000	8,900,000	21,200,000	26,800,000
Mexico.....	5,600,000	7,400,000	11,200,000	10,700,000
Netherlands.....	61,500,000	70,900,000	118,700,000	126,800,000
Norway.....	11,800,000	12,900,000	28,500,000	29,600,000
Roumania.....	16,400,000	25,700,000	15,600,000	21,000,000
Russia.....	330,000,000	389,000,000	130,200,000	148,800,000
Spain.....	33,400,000	39,000,000	17,000,000	21,000,000
Sweden.....	39,000,000	43,600,000	45,300,000	44,800,000
Switzerland.....	41,400,000	42,800,000	107,700,000	114,800,000
Turkey.....	16,000,000	16,700,000	24,900,000	26,900,000
United Kingdom.....	182,400,000	192,500,000	262,300,000	271,200,000
All other countries.....	119,100,000	133,200,000	93,100,000	109,700,000
Total.....	2,126,300,000	2,309,800,000	1,779,000,000	1,928,400,000
Precious metals.....	89,500,000	71,700,000	40,300,000	28,100,000
Grand total.....	2,215,800,000	2,381,500,000	1,819,300,000	1,956,500,000

¹ Statistics not given.

As seen from the foregoing table Russia ranks first in the value of the imports into Germany, the United States second, and Great Britain third. The last-named country, however, is the best customer for German products, Austria-Hungary coming next, and the United States third. If the total trade between the countries is considered, Russia is first with \$537,800,000, the United States second with \$472,100,000, and Great Britain third with \$463,700,000. Many of the exports to Great Britain are reshipped to the British colonies. The decrease in the imports from Austria-Hungary in 1911 was due principally to the smaller receipts of Bohemian coal, owing to abnormally low water in the Elbe during the last half of the year and to smaller shipments of meat on account of the scarcity of Austrian cattle. There is a decided growth in the trade between Germany and the Latin-American republics. The shipments from Germany to China increased from \$13,500,000 in 1909 to \$17,100,000 last year.

Of the total imports and exports in 1911, not including precious metals, 66 per cent of the trade was with other European countries.

Imports and Exports by Articles.

Detailed corrected values of Germany's foreign trade in 1911 have not yet been published, but in the following table are given the

weights in metric tons of the imports and exports for the past two years of the more important articles in the trade of Germany with other countries:

Articles.	1910	1911	Articles.	1910	1911
IMPORTS.			EXPORTS.		
Breadstuffs:	<i>Tons.</i>	<i>Tons.</i>	Aniline, etc.	<i>Tons.</i>	<i>Tons.</i>
Barley.....	3,000,624	3,636,172	Beer.....	59,216	62,078
Bran, etc.....	1,280,279	1,588,114	Breadstuffs:	96,475	107,894
Corn.....	573,126	743,421	Flour, wheat.....	190,015	162,566
Oats.....	457,721	628,306	Oats.....	436,530	296,700
Rye.....	383,506	613,903	Rye.....	820,007	771,330
Wheat.....	2,343,742	2,485,579	Wheat.....	281,369	315,367
Coal, and manufactures of:			Cellulose.....	170,753	165,803
Briquets.....	241,266	210,933	Clothing.....	35,890	36,797
Coal.....	11,195,593	10,913,948	Coal, and manufactures of:		
Coke.....	623,477	598,958	Briquets.....	1,958,252	2,477,492
Lignite.....	7,307,708	7,063,064	Coal.....	24,257,421	27,412,218
Cocoa beans.....	43,941	50,855	Coke.....	4,127,630	4,554,851
Coffee.....	170,946	183,269	Lignite.....	10,048	11,109
Copper, raw.....	181,551	191,590	Copper and brass ware.....	80,691	86,030
Copra, palm kernels, etc.	398,442	398,413	Cotton, and manufactures of:		
Cotton, and manufactures of:			Raw.....	50,094	40,538
Raw.....	426,691	472,399	Manufactures.....	40,733	43,000
Manufactures.....	44,968	45,799	Yarn.....	5,463	5,425
Yarn.....	13,581	13,054	Goldware.....	2,108	1,913
Eggs.....	150,871	157,214	Silverware.....	10,510	11,907
Flax.....	54,138	55,199	Hides and skins, including fur skins.....	84,693	83,880
Fruit:			Indigo, natural and artificial.....	17,564	21,611
Fresh.....	713,729	650,251	Iron and steel, and manufactures of:		
Dried.....	100,939	96,524	Blooms, bars, etc.....	897,831	1,106,745
Fur skin.....	209,973	240,817	Machinery.....	400,692	474,130
Iron and steel, and manufactures of:			Pig iron.....	786,855	829,393
Machinery.....	90,061	76,129	Plates.....	253,112	290,273
Ore.....	9,816,822	10,812,595	Sheets.....	92,334	113,591
Jute.....	128,216	141,016	Rails.....	515,722	520,151
Oil cake and meal.....	713,933	755,465	Structural.....	536,293	608,572
Oils, etc:			Wire.....	65,079	58,055
Benzine—			Leather manufactures.....	8,973	9,413
Crude.....	146,450	187,983	Oil cake and meal.....	204,358	236,937
Refined.....	45,288	68,096	Planos, etc.....	17,632	20,216
partly refined.....	230,516	260,242	Porcelain ware.....	47,037	51,965
Lubricating oil.....			Potash:		
Petroleum—			Muriate of potash.....	270,237	329,734
Crude.....	24,509	33,550	Sulphate of potassium.....	76,285	109,555
Refined.....	989,336	955,482	Sulphate of potassium—magnesium.....	197,408	282,574
Phosphates:			Raw potash salts.....	1,181,207	1,154,974
Thomas meal, etc.....	423,134	474,792	Rags.....	90,799	95,735
Raw.....	723,271	831,027	Rubber goods.....	9,164	10,329
Provisions:			Salts, etc.....	370,484	374,633
Butter.....	42,282	56,306	Silk goods.....	93,180	98,616
Lard.....	58,389	96,363	Soda, etc.....	57,111	60,101
Oleomargarine.....	23,468	26,625	Sugar.....	710,370	870,208
Sausage casings.....	32,691	35,621	Wool, and manufactures of:		
Rice.....	306,405	153,150	Combed.....	9,937	9,880
Rubber, crude.....	18,705	19,948	Manufactures.....	33,157	32,530
Salt peter.....	751,924	733,053	Raw and carded.....	16,471	14,122
Seeds:			Yarn.....	10,910	12,920
Clover, etc.....	51,212	57,065	All other articles.....	14,454,424	14,661,238
Linseed.....	320,522	276,102			
Silk, and manufactures of:					
Raw.....	4,027	3,837			
Manufactures.....	103,908	98,538			
Tin.....	14,297	14,500			
Tobacco, raw.....	65,209	72,065			
Wood for building purposes.....	5,408,917	5,775,891			
Wool, and manufactures of:					
Combed.....	20,458	20,249			
Raw and carded.....	197,944	196,885			
Yarn.....	6,261	6,209			
All other articles.....	13,746,049	15,080,786			
Total.....	64,496,058	68,363,326			

In addition to the foregoing, there were imported 142,655 horses in 1911, compared with 149,104 in 1910, and 518 ships and boats,

compared with 857 in the previous year. The horses exported last year numbered 7,940 against 7,116 the preceding year, and the vessels exported totaled 828 and 753 for 1911 and 1910, respectively.

Imports of Breadstuffs.

Although the native crop of wheat for 1911 was good, increased consumption and the facilities of the import-certificate system were the reasons for larger imports and exports than during the previous year. Of the total imports of breadstuffs last year, the principal countries whence imported and the amount in metric tons were as follows: Wheat, United States 301,722, European Russia 1,118,395, Argentina 537,710, Roumania 224,667, Australia 111,775; rye, Russia in Europe 556,876, Roumania 49,526, Servia 2,961; oats, Russia in Europe 515,568, Argentina 86,564, Roumania 22,097; barley, United States 950, Russia in Europe 3,223,496, Roumania 134,653, Austria-Hungary 85,153; corn, United States 143,100, Russia in Europe 230,890, Roumania 143,101, Argentina 128,926; wheat flour, United States 4,939, Austria-Hungary 4,381, Belgium 2,892; rye flour, Austria-Hungary 766, Belgium 207.

Output of Principal Crops.

There were no important increases in the areas planted in farm products in 1911 as compared with the previous year. Slight decreases were noted in the acreage of spelt, winter rye, potatoes, clover, lucerne, and meadow hay. Despite the severe drought which prevailed throughout the summer and which greatly reduced the yield of fodder and certain other crops, the harvest of the principal grains was bountiful. Wheat and rye came through the winter in such a healthy state that they were able to withstand the dryness and matured under the influence of the warm weather with a color and quality seldom in evidence. Grouping the spring and winter wheat production, the total harvest was 4,066,335 metric tons, which is a record, while the rye crop was second only to that of 1909.

The following table shows, in metric tons, the quantity of the principal crops harvested in 1911, compared with 1910:

Crops.	1910	1911	Crops.	1910	1911
	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>
Wheat:			Barley.....	2,902,938	3,159,915
Winter.....	3,428,686	3,640,229	Oats.....	7,900,376	7,704,101
Spring.....	432,793	425,106	Potatoes.....	43,498,395	34,374,225
Spelt.....	387,931	402,729	Clover and grass.....	11,943,667	7,070,465
Rye:			Lucerne.....	1,658,219	1,091,821
Winter.....	10,371,855	10,727,071	Meadow hay.....	28,250,115	19,975,324
Spring.....	139,305	139,045			

Failure of Fodder Crops.

The first hay crop was fair, while the following was almost a total failure. The potato and sugar-beet crops were also adversely affected. Potatoes being a staple article of food, especially among the poor, the reduced yield brought distress. The price advanced so in the course of the 1911 winter that despite the large decrease in the crop it yielded approximately the same money return as for 1910. The almost total failure of the fodder crops was the most distressing feature of the situation. Farmers who normally had fodder to sell not only retained what they had produced but were in many instances forced to buy. It was stated that some 8,000

tons of beet pulp were imported from the United States, the first instance of such purchases. The principal article imported was barley from southern Russia, and as the drought had affected that region also the prices advanced heavily.

The situation was aggravated by the operation of the customs drawback system, which, making it possible to sell German grain at a better profit abroad than at home, induced a countervailing export to Russia. Toward the end of August the railway administrations, with a view to ameliorating the situation, reduced the tariffs on fodder by one-half. With high prices for fodder the prices of cattle advanced. Cattle epidemics were prevalent during the summer. This not only induced a still further increase in cattle prices but through the quarantining of affected regions hindered the marketing of other farm products. The abundance and excellent quality of the bread grains, especially the high flour content of the wheat, were about the only redeeming features in the agricultural situation.

Imports of Fuel, Copper, Cotton, Rice, Lard, etc.

Owing to the record production of mineral fuel in Germany in 1911 all the imports of briquets, coal, etc., in that year fell off as compared with 1910. The great activity in the electrical industries is reflected in the increased imports of raw copper. Of the receipts in 1911, 171,763 tons, or 89.6 per cent of the total imports, came from the United States. All petroleum products for illuminating and lubricating purposes, except refined petroleum, showed an increase in the imports in 1911. The great bulk of refined petroleum received during last year was American oil, the figures being 745,302 tons from the United States, 142,876 tons from Austria-Hungary, 48,631 tons from Roumania, 16,093 tons from Asiatic Russia, and 2,389 tons from Russia in Europe.

Raw cotton receipts in 1911 increased over 45,000 tons as compared with 1910, due principally to the lower prices of the American staple, which enabled the German spinners to replenish their depleted stocks. Of the total amount of the staple imported last year, 336,138 tons came from the United States, an increase of 56,288 tons over 1910; 60,427 tons from British India, a falling off of 22,398 tons; and 36,902 tons from Egypt, an increase of 3,217 tons. The notable falling off in the imports of rice in 1911 was due to the high prices which prevailed in consequence of the short crops in Japan, Cochin China, Siam, and Java. There were increased lard receipts of nearly 38,000 tons in 1911, owing to the low prices of the American product. Of the total imports of lard in 1911, 91,914 tons came from the United States.

Other products showing an increase in the receipts during the past year were cocoa beans, coffee, jute, crude rubber, fur skins, machinery of all kinds, iron ore, oil cake and meal, phosphates, butter, sausage casings, clover and other seeds for planting, unmanufactured tobacco, and wood for building. Articles showing a decrease in the imports besides those mentioned were copra, palm kernels, cotton yarn, fresh and dried fruit, saltpeter, and linseed.

Review of the Export Trade.

The activity displayed in all branches of the coal-tar color industry in 1911 was reflected in the increased exports of the finished products. All the breadstuffs, with the exception of wheat, showed a consid-

erable falling off in the exports during last year, owing to the home demand and the short fodder crops. The favorable conditions which prevailed in the German coal and iron industries are shown in the increased shipments of the various products. The exports of coal were over 3,000,000 metric tons greater than in 1910, and the shipments of all lines of manufactured iron products were larger, with the exception of steel and iron wire. The greatest increases in the machinery exports were in those for wood and metal working, cotton spinning, mowing and thrashing, centrifugal dairy, sewing, weaving, brewing, distilling, milling and mining, and dynamos and steam locomotives. There were notable increases in the exports of various products of the German potash industry, the great bulk of the shipments going to the United States. Notwithstanding the keen competition of foreign sugar, especially the Russian product, the shipments of German raw and refined beet sugar were nearly 160,000 tons greater than in 1910.

Other articles showing an increase in the exports in 1911 were beer, clothing, copper and brass ware, cotton goods, silverware, natural and artificial indigo, leather manufactures, silk goods, soda, and wool yarn. There were decreased exports in 1911 of the following articles besides those already mentioned: Raw cotton, cotton yarn, goldware, hides and skins, manufactures of wool, and raw and carded wool.

Trade in Mineral and Metallurgical Products.

The German imports and exports for the past two years of the principal mining and metallurgical products were as follows, in metric tons:

Products.	Imports.		Exports.	
	1910	1911	1910	1911
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Aluminum.....	9,892	10,454	613	768
Coal.....	11,195,593	10,913,948	24,257,421	27,412,218
Copper, raw.....	181,551	191,590	7,063	7,106
Gold, uncoined.....	85	50	14	6
Lead.....	81,541	100,515	30,997	32,083
Nickel.....	4,606	2,598	1,400	1,592
Ore:				
Copper.....	22,194	23,327	23,729	27,396
Gold.....	139	250		
Iron.....	9,816,822	10,812,595	2,952,632	2,581,698
Lead.....	112,151	143,598	2,361	3,746
Manganese.....	487,872	420,709	4,559	9,615
Nickel.....	9,934	14,997		
Pyrites, etc.....	792,735	826,214	9,871	11,015
Silver.....	2,091	2,065		
Tin.....	17,343	17,971		
Zinc.....	240,584	262,399	59,440	48,998
Pig iron.....	136,326	129,850	786,855	820,393
Silver, uncoined.....	648	712	282	366
Tin.....	14,297	14,500	7,521	7,582
Zinc.....	39,328	48,355	82,603	77,088

Coal Production and Trade.

The reduction in the barge traffic, owing to the abnormally low water which prevailed in the navigable streams of Germany during the latter part of 1911 and the car shortage of the German railways from time to time, tended to restrict the output of coal. Several mines were forced to reduce their production during the last months of the year. Despite this, the coal production of Germany reached

record figures. In the following statement, compiled from the official figures of the Ministry of the Interior, is shown the output of coal, lignite, coke, and briquets for the past two years and the imports and exports, in metric tons:

Description.	Production.		Imports.		Exports.	
	1910	1911	1910	1911	1910	1911
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Briquets.....	19,567,016	21,827,667	241,266	210,933	1,988,252	2,477,492
Coal.....	152,881,509	160,742,272	11,195,593	10,913,948	24,257,421	27,412,218
Coke.....	23,600,362	25,405,108	623,477	598,958	4,127,630	4,554,851
Lignite.....	69,104,867	73,516,789	7,397,708	7,069,064	10,048	11,109
Total.....	265,153,754	281,491,836	19,458,044	18,792,903	30,383,359	34,455,670

The increased shipments of coal were due to the greater output, while the decreased imports was caused in part by the difficulties of water transportation and the high freight rates. Competition of foreign coal kept prices down, the Westphalian syndicate and the Upper Silesian mining companies being obliged to make concessions. At the close of the year, however, prices were better. Owing to the high freight rates in the Mediterranean on account of the Turco-Italian war, the competition of English coal was not so much felt. The activity in the home iron industries increased the demands, and the Westphalian syndicate was enabled to raise prices, especially for immediate and pressing wants.

Syndicate to Control Coal Sales.

The syndicate will abolish at the end of June, 1912, the bounty of 1.5 marks (35.7 cents) per ton on coal used in the manufacture of iron intended for export. Since the first of the present year the German coal market has continued to improve. The strike which occurred the beginning of the present year in Belgium, involving about 26,000 miners, the temporary cold weather, and the general strike of coal miners in Great Britain all tended to increase the demands for German coal, so that the coal syndicate again raised its prices 25 pfennigs to 1 mark (6 to 23.8 cents) per ton. Its greatest achievement, however, was the arrangement entered into on January 15 last with the Prussian Fiscus, whereby the syndicate undertakes the sale of the coal for the Prussian State mines for one year. Similar agreements were also made with the most important private outsiders, so that the syndicate will be able to eliminate what was formerly a keen competition.

Coal Trade by Countries.

Of the coal imports in 1911 Great Britain furnished 9,422,695 tons, a decrease of 230,420 tons as compared with 1910. The receipts of Austrian coal amounted to 523,494 tons, against 570,793 tons. The great bulk of the German coke imports came from Belgium. Austria-Hungary took more than one-third of the total German coal shipments, followed by the Netherlands, Belgium, France, Switzerland, Russia, Italy, Spain, Egypt, etc.

The effect of the coal strike in Great Britain is shown in the German foreign coal trade for the first quarter of this year. The imports of coal fell from 2,088,386 tons during the first three months of 1911

to 1,899,044 tons during the same period of 1912. The coal imports from Great Britain during March of this year fell off nearly one-half compared with the same period in 1911, the figures for 1912 and 1911 being 373,896 and 674,992 tons, respectively. The exports of German coal during the first quarter of 1912 increased from 6,367,819 tons to 7,595,300 tons as compared with the same period in 1911.

The approximate consumption of coal in Germany in 1911, not including the stocks on hand at the beginning of the year, was 144,244,202 tons, against 139,819,681 tons in 1910. The approximate consumption of lignite during the report year was 80,527,782 tons, and in 1910, 76,440,134 tons; of coke, 21,448,589 tons, against 20,095,905 tons; and of briquets, 19,561,108 tons, as compared with 17,800,030 tons in 1910.

Production and Shipments of Potash Salts.

The following statement prepared from provisional statistics published by the Imperial Statistical Office shows the production and value of potash salts in Germany during the past two years:

Description.	1912		1911	
	Tons	Value.	Tons.	Value.
Kalnit.....	4,240,667	\$12,708,000	4,425,497	\$13,757,000
Muriate of potash.....	741,250	17,370,000	838,420	19,851,000
Sulphate of potash.....	84,584	2,980,000	107,631	3,968,000
Sulphate of potassium-magnesium.....	3,273	668,000	48,283	8,910,000
Double manure salts.....	32,206	150,000	36,784	185,000
Other raw potash salts.....	4,062,004	9,085,000	5,181,379	11,794,000
Total.....	9,172,993	42,930,000	10,637,944	58,465,000

The exports of the most important German potash and potash salts for 1910 and 1911 and the amount shipped to the United States are shown in the following table:

Description.	1910		1911	
	Total.	To United States.	Total.	To United States.
Muriate of potash.....	Tons. 270,237	Tons. 180,590	Tons. 329,734	Tons. 229,240
Sulphate of potassium.....	76,285	39,793	108,555	56,970
Sulphate of potassium-magnesium.....	197,408	92,415	282,574	163,775
Raw potash salts.....	1,181,208	721,246	1,154,974	642,573
Total.....	1,725,138	1,034,044	1,876,837	1,072,558

The Potash Situation—Output of Other Minerals.

One of the most notable features in the potash industry in 1911 was the formation of a new potash syndicate, which comprised most of the productive German potash mines. Another important event was the settlement of the dispute between the syndicate and the large American potash companies, regarding the contracts entered into by the latter in 1909 with the Schmidtman group for future supplies of potash. An agreement was consummated through the negotiations at Hamburg, regulating the prices and rebates for the next five years. After long discussions between the officials of the syndicate and the

outsiders—the Aschersleben and Sollstedt mines—all difficulties were finally overcome, so that on December 30, 1911, the two outside mines were admitted as members of the potash combination.

As the new potash law has not been quite two years in force, it is difficult to conclude what will be its effect. Judging from the numerous articles which have appeared in the leading journals and other periodicals, it is the opinion of many that the purposes of the law, to prevent the underselling of German potash to foreign consumers and to eliminate friction among the home mining companies, have not as yet been accomplished. Complaints have been made against the quotas allowed to the members of the syndicate by the committee appointed under the provisions of the law to fix the said quotas for the coming five years, commencing January 1, 1912. Another result of the act, it is claimed, is the formation of many new companies. On January 1 last 94 existing mines were included in the table of quotas. In 1911 the number of syndicated mines increased from 67 to 79, including the Aschersleben and Sollstedt mines. It is estimated that the number of mines being opened will reach 100 and about 20 more are projected. The grave question naturally arises whether the quota can be assigned so that the old and new members of the syndicate will have remunerative returns for their investments.

The output of the following minerals for 1911 is given in metric tons: Asphalt, 81,902; oils, 142,992; pyrites, 217,459, and the following ores: Copper, 868,600; iron, 29,879,361; lead, 140,154; and manganese, 87,297. The output of salt was 645,991 metric tons.

German Pig-Iron Production.

The production of pig iron in Germany in metric tons during the past two years was as follows:

Description.	1910	1911	Description.	1910	1911
	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>
Foundry pig and pig iron, first fusion.....	2,965,810	3,063,583	Steel and spiegel iron.....	1,372,196	1,733,280
Bessemer.....	471,366	374,455	Puddle iron.....	644,392	511,792
Thomas iron.....	9,338,961	9,851,113	Total.....	14,792,725	15,534,223

The production of pig iron in 1911 was greater than in any previous year.

Syndicate to Govern Sales of Pig Iron.

One of the most important events in the history of the German pig-iron industry was consummated during the past year. After protracted negotiations which commenced shortly after the dissolution of the various pig-iron syndicates, an agreement was finally reached in September last, by which all the important furnaces in Germany entrusted the sales of their products to the new syndicate at Essen-Ruhr, called the Roheisen Verband G. m. b. H. The new syndicate represents production quotas of about 3,500,000 tons. The new arrangement went into effect January 1, 1912, and continues until December 31, 1915. If no notice of dissolution is given before July 1, 1915, the contract will continue in force four years longer. If new local competitors should enter the field, whose output would amount to more than 2½ per cent of the total production quota

of the syndicate, the syndicate may be dissolved by a three-quarters vote of the members, or by a majority vote if the competition should amount to 5 per cent of the production quota of the syndicate. The agreement covers the production of the members of the syndicate of iron which contains less than 30 per cent manganese or 6 per cent silicium. Special contracts have been made between certain furnaces and the syndicate regarding the production and sale of ferromanganese and ferrosilicium. The amount of their own iron consumed by the members in the production of steel is not included in the quotas. The quantity of iron thus consumed is, however, controlled by the officials of the syndicate.

Besides the producers of iron, a number of iron dealers have been admitted as members of the syndicate in order to have closer relations between the producer and consumer. Penalties are prescribed for the violations of the provisions of the contracts. They vary from 10 to 30 per cent of the invoice value of all iron not sold through the syndicate. For nondelivery of iron through neglect there is a penalty of 3 marks (71.4 cents) per ton.

The increased production of pig iron in 1911 resulted in greater shipments abroad and decreased receipts of foreign iron. The exports of pig iron during 1911 were 829,393 tons, against 786,855 tons in 1910 and 471,046 tons in 1909. The largest shipments, amounting to 468,121 tons, were sent to Belgium, and 6,646 tons were exported to the United States. Of the total imports of pig iron in 1911, amounting to 129,850 tons, 85,435 tons were received from Great Britain and 38,791 tons from Sweden. [Particulars regarding the renewal of the German Steelworks Union were printed in the Daily Consular and Trade Reports of May 21, 1912.]

The Steel Industry.

The results of the year's business in the steel industry were on the whole satisfactory. During the first half of the year the trade suffered from political conditions at home, and the strikes in Great Britain and Sweden, but during the second half of the year prices were somewhat better. The price of beams, for instance, which was \$22.85 per ton in June, was increased by the Steel Syndicate to \$24.37 for Germany. The prices of fine sheet iron on January 1, 1912, ranged from \$33.32 to \$34.51.

The exports of puddle bars and ingots in 1911 were 651,415 tons, against 494,400 tons in 1910; and the shipments of steel rails in the two years were 520,151 and 515,722 tons, respectively. The exports of beams in 1911 were 408,178 tons, as compared with 382,192 tons during the previous year. The Steel Syndicate's sales of the various iron and steel products amounted to 12,195,989 tons in 1911, an increase of 1,209,113 tons over 1910.

The Prussian Government has ordered for use on its railways 241,610 tons of steel rails at an average price of \$27.85 per ton, 108,020 tons of accessories (bolts, nuts, etc.) at an average price of \$41.41 per ton, and 144,870 tons of steel ties at an average price of \$26.18 per ton. The Prussian Government will also place orders for 1,130 locomotives and electric traction engines at an average price of \$16,422 each, 2,696 passenger cars, at an average price of \$4,760, and 26,608 baggage and freight cars, the former at an average price of \$2,380 to \$3,332 and the latter at an average price of \$714.

Output of Shipbuilding Yards.

The year 1911 was a favorable one for the German shipbuilding industry, more new tonnage being set afloat than ever before, although the number of craft launched was less than in several previous years. Twenty-six warships, having an aggregate gross registered tonnage of 49,544; 717 seagoing merchantmen of 343,293 tons; and 116 river boats of 13,926 tons, were completed in the private shipyards of Germany during the year. Of the 717 seagoing merchantmen built, 599, of 329,562 tons, were for German account. It is estimated that the values of these, together with harbor craft furnished to the German lines, was \$71,000,000. In addition, 139 merchantmen, with a tonnage of 59,647 were built for German account in foreign shipyards. There were 118 merchantmen, 3 warships, and 30 river boats, having a total gross registered tonnage of 18,784, constructed for foreign account in German yards. Of the total 1911 output of the German yards, 43 per cent of the craft, embracing 81 per cent of the tonnage, was steam.

At the close of the year the German shipyards had vessels aggregating 687,705 tons in course of construction and numerous new orders in sight. There were 3 large freight steamers delivered for the Hamburg-American line during the first part of 1911 to be used in the east Asian trade, and 14 vessels were undelivered and in course of construction at the end of the year. Among the vessels which are still on the ways are two motor-driven freight ships of 5,500 and 4,700 registered tonnage, respectively. Two tank steamers similarly equipped with gas engines are being built for the German-American Oil Co. Among the ships in course of construction for the Hamburg-American Line were two 50,000-ton sister ships, *Europa* and *Imperator*, which are to be used in the north Atlantic service. The additions to the North German Lloyd shipping last year included two small freight steamers for the South American service. A contract has been let by the latter company for a steamer of about 25,000 tons to make 20 knots, and to be delivered in 1914. This vessel is built with special reference to the steerage-passenger transportation in the north Atlantic service.

Tonnage of German Merchant Marine and Other Shipping Statistics.

The German merchant marine on January 1, 1911, comprised 4,675 vessels, with a gross registered tonnage of 4,513,191. Of the vessels, 42 per cent, embracing 87 per cent of the tonnage, were steam, and 53 per cent, embracing 10 per cent of the tonnage, were sail. The remainder were lighters, barges, etc.

On the whole, last year was an exceptionally favorable one for the maritime transportation companies. The only unsatisfactory feature was the decline which took place in the volume of emigration, but the losses sustained in this department were more than made up by the exceptionally large freight business done. The North German Lloyd, which declared no dividend in 1908 and 1909, and in 1910 declared one of 3 per cent, last year reported a dividend of 5 per cent. The Hamburg-American Line increased its dividend from 8 to 9 per cent, and, in anticipation of the extension in ocean carrying expected to follow the opening of the Panama Canal, voted to increase its capital from \$30,000,000 to \$36,000,000. The German Levant Line declared a dividend of 6 per cent on its 1911 business—its first divi-

dend since 1902—and is now entertaining a proposition for increasing its capital to \$2,800,000.

The total number of emigrants leaving the port of Bremen last year was 115,044, compared with 157,896 in 1910, and those leaving Hamburg totaled 86,895 and 118,131 for the two years, respectively.

Increased Receipts of German Railways.

Among the indications of the commercial growth which occurred last year was the increase of nearly \$33,000,000 in the freight-traffic receipts of the railroads compared with 1910. The total receipts from the freight transported on the German railroads last year amounted to \$440,800,000, and from passenger transportation \$195,200,000, a gain of nearly \$10,000,000. A portion of the increase in freight receipts may be attributed to the fact that, owing to the low water in the navigable streams following the dry summer, much bulky freight normally transported by barges was diverted to the railways during the autumn months. There was, however, an offset in the fact that in order to alleviate the distress caused by the almost total failure of the fodder crops the railways reduced the rates on many agricultural products as much as 50 per cent. It is estimated that the loss of income resulting from these reductions amounted to considerably more than \$1,000,000 during September and October alone.

Decreased Profits from Finished Wares.

Owing to the increase in wages, the higher prices of raw materials, and the necessity for increased capital outlays, the decrease in profits from finished wares, with few exceptions, was general throughout last year. The prices of raw and sheet zinc, tin at certain periods, lead, copper from October on, and tin plate during the first nine months were high. Prices for iron and coal were on the whole well maintained throughout the year and toward the end advanced. Wool quotations went up 5 to 10 per cent from January to May, remaining stationary throughout the summer and falling off somewhat in the autumn. Hemp, flax, linen yarn, and raw jute were more expensive than in 1910. Cotton and silk were cheaper than in 1910. Hides and furs and woods of different kinds were higher.

The sharp competition which prevailed in all branches of industry necessitated new and improved factory erections, greater expenditures for advertising, etc. Except in the building industry the needed capital was easy to obtain, although the interest rate was somewhat higher than in 1910. The fact that, despite a lively demand existing throughout the year, prices for finished articles with but few exceptions did not advance in proportion to the increase which occurred in the cost of production is attributed in some quarters to a belief that the productive capacity of German industry is developed beyond the absorbing capacity of the market. Liberal allowance of bank credit has encouraged plant and other extensions which the state of the market has not altogether warranted; and in the case of a number of large industrial undertakings it is said that extensions have been made more with an eye to impending syndicate renewals than with reference to the actual requirements of consumption.

Industrial Amalgamations.

The extension of industrial capacity has brought about a generally increased tendency toward centralization, particularly in the steel

and iron, lignite, potash, metal, electrical, chemical, and textile industries, and among the manufacturers of gas motors and of railway cars. During 1911 there was a significantly smaller number of syndicate dissolutions. On the other hand, many new organizations were effected and existing organizations continued. The formation of the pig-iron syndicate was the most important of these events. Others, brought about toward the close of the year, were the Lignite and Briquet Sales Union, organized in December by the lignite mine works of eastern Germany, representing a combined yearly output of about 150,000 metric tons of briquets and 135,000 tons of lignite; the United Brick Works (Ltd.), organized in Weissenfels by a large number of Thuringian brick and earthenware works with a view to controlling output; and the Convention of Chemnitz Wool Stocking Factories, founded January 1, 1912, also with a view to regulating competition.

Three syndicates in the hardware, textile, and tobacco industries, respectively, were renewed, and in addition the following important syndicate extensions took place: An agreement was effected between the Prussian Government, in its capacity as mine operator, and the Rhenish-Westphalian Coal Syndicate; the Orlas Mining Co. entered the potash syndicate; the southern and western milling associations effected a union with a view to establishing a more complete control over the flour industry; and the Economic Union of German Gas Works (Ltd.), with headquarters at Cologne, entered in an "agreement as to common interests" with two other similar associations. Under the agreement the Cologne syndicate has taken over the sale of all by-products of the associated factories. At the close of the year the syndicating of the petroleum interests and the extension of the Rhenish-Westphalian Cement Syndicate were under consideration.

The Chemical Industry.

With but few exceptions, conditions in the various branches of the chemical industry were most favorable. Heavy orders were received both for home and foreign consumption, and in many lines the prices for natural and artificial preparations were higher. The demands for drugs and chemicals were so large that the manufacturers of raw materials, such as acids, ammonia, etc., experienced great difficulty in filling their orders. There were especially notable increases in the demands for medicinal preparations on account of the numerous cases of illness, such as influenza, scarlet fever, diphtheria, and other ailments due to the heat of last summer. Many orders were received by the German manufacturers for disinfecting and other materials which were used in stamping out the plague in the Far East.

Luftsalt peter or air salt peter manufactured from nitrogen extracted from the air by the Norwegian and Swedish plants is slowly finding its way to the market. It is expected that in the near future the Norwegian salt peter can be shipped in large quantities to the centers of consumption. Its success as a competitor with the Chile product will naturally depend upon the price. At present the artificial salt peter is selling at 8 to 9 pfennigs (1.9 to 2.1 cents) more per kilo (2.2 pounds) than Chile salt peter, but it is thought that the prices will soon be equalized. In 1911 there were only 493.3 metric tons of soda salt peter (natron salt peter) imported from Norway, as against 730,939 tons received from Chile. There were also imported in 1911 473.4 tons of nitrate of ammonia from Norway and 139.2 tons from

Sweden, and 14,494 tons of nitrate of lime (Saltpetersäures Kalk) from Norway and 1,033.6 tons from Sweden. Not only in Sweden and Norway are new plants in course of construction for extracting nitrogen from the air, but also in Upper Bavaria, in the Tyrol, in Switzerland, and in the Valley of the Rhine.

The favorable business year of the German chemical industry is reflected in the increased dividends declared by many of the chemical companies, in the amount of capital invested in new companies, and in the capital used in extending existing industries. The total amount of new capital invested in the chemical industry last year was \$16,226,840, compared with \$6,333,180 for 1910. For last year \$10,010,280 was employed for the creation of new companies and \$6,216,560 for the extension of existing industries.

The drought of last summer unfavorably affected the crops of medicinal roots, leaves, and seeds, in consequence of which the prices of these raw materials were much higher. The prices of certain bulky products used in the chemical industry were also affected, owing to the difficulty of securing water transportation.

The Machinery Trade.

In general, the conditions prevailing in the German machinery trade in 1911 were more favorable than in the previous year, although all the branches were not affected alike. The production was greater in many lines; there was a larger demand for raw material, as shown by the statistics of the coal and iron industries; and the number of applicants for work was smaller during the year as compared with the corresponding months of 1910.

The dullness in some of the branches of the textile industry naturally affected the trade in textile machinery, and the purchasing capacity of the farmers in some localities was reduced on account of the prevalence of the foot-and-mouth disease and the shortness of the fodder crops, which resulted in a falling off in the home sales of agricultural machinery. There were less sales of tulle-making and tulle-finishing machines, as the demand for the finished product was small, owing to the reigning fashion in ladies' dresses. Manufacturers of locomotives and railway supplies complained of the smallness of the orders from the State Railway Administrations.

This condition will not prevail during the present year, as the Prussian Government will give orders for exceptionally large supplies of locomotives, passenger and freight cars, and other railway accessories. The manufacturers of steam locomobiles for agricultural purposes are beginning to feel the competition of electric traction, which is more and more replacing other forms of power, the electric current being furnished cheaply by the overland central power station. In the gas and combustion motor branches of the industry business was good throughout the year. The use of crude oil for fuel is constantly increasing in Germany, so that the manufacturers of oil-burning apparatus have been kept busy filling their orders, especially for the larger and medium types. The prices of machinery in general showed a tendency to decline, owing to the keen competition in the home and foreign markets, but on the whole the profits were satisfactory. The balance sheets of 312 machinery companies in 1911 showed an average dividend of 8.3 per cent, as compared with 7.8 per cent in the previous year. Their capital increased from \$165,000,000 in 1910 to \$174,800,000 in 1911.

- As in other German industries, there was a tendency toward the concentration of capital in the machinery trade during 1911. The most important fusions were those of the Lubecker Maschinenbau Anstalt with Orenstein & Koppel and Arthur Koppel and the Westfälischen Maschinenbauindustrie, Gust. Moll & Co., with the Maschinenbau A. G. Balcke in Bochum.

The Building Situation—Leather Industry.

In the building trade of Germany in 1911 less activity was displayed than in the previous year, owing to the difficulty of obtaining credit from the financial institutions for building operations. Another factor which tended to hold back the erection of new buildings was the new imperial tax on the unearned increment (Reichswertschöpfungssteuer). In the allied industries of the building trade, stone, cement, elevators, builders' hardware, etc., the situation on the whole was as favorable as in the previous year.

Notwithstanding the satisfactory conditions which prevailed in the leather industry during the first six months of 1911, the general results for the entire year were disappointing. In the first semester the weather conditions favored consumption, and the sales of shoes reached record figures. Owing to the dry summer the demand for shoes was limited, and the autumn trade was also unsatisfactory. Some of the shoe factories worked short time and in some instances the factories were closed. In the other branches of the industry such as carriage and automobile upholstery, saddlery, pocketbook and portfolios, belting, clothing, sporting goods, etc., business was good during the first six months, causing a large consumption of leather. The prices of hides reached abnormally high figures in the autumn, receding somewhat in December, but the quality of the hides offered in that month was inferior.

Increased Earnings of Breweries—Paper Industry.

The hot weather of last summer had an important influence on the consumption of beer, and the financial results were most satisfactory; 467 brewing companies with a capital of \$132,817,000 declared an average dividend of 7.1 per cent, as compared with an average of 6.2 per cent declared by 472 companies with capital of \$138,127,000 in 1910.

Reports on the paper industry were generally favorable. Owing to the unusually low water for power purposes, the output of wood pulp declined and the cost of production increased. The higher prices of the pulp, however, were not followed by a corresponding increase in the prices of the finished products. On the whole, the trade in all kinds of paper was good during the year and the profit satisfactory.

Condition of the Textile Industries.

The favorable conditions which prevailed in most branches of trade during the report year were not felt to a great degree in the cotton textile branch. The decrease in the price of cotton in July, however, caused many mills to buy large quantities. In the wool industry the prices of the raw staples, together with those of yarn waste and artificial wool were high at the beginning of 1911. There was a gradual fall, however, in prices until autumn, when the offers on the London wool market improved. The price fluctuations were unfavorable to the weavers and spinners, and besides, orders were lacking until the last quarter of the year, when the situation improved. The trade in

cheap wool and half-wool cloths for men's and women's clothing was satisfactory, but that in the finer cloths was quiet throughout the year. The outlook for all branches of the woolen industry at the beginning of 1912 was more favorable.

Business was not specially active in the silk industry. With the exception of plush and velvets, sales were difficult and only at low prices. The prospects for the present year are more favorable.

In the flax and linen industries great difficulties were experienced in obtaining raw materials. The prices of flax were unusually high until autumn. The prospects for the coming year are favorable, though much depends upon the state of the Russian flax market. Conditions in the jute industry were satisfactory throughout the year. There were but few labor troubles and the prices were regulated by the German syndicate of jute manufacturers.

Throughout the textile industry the prices of finished products, with but few exceptions, did not keep pace with the greatly increased cost of production. The best results were shown in those branches which were favored by the new fashions.

Decrease in the Prices of Rubber Tires—Firearms and Ammunition.

In the rubber industry business was brisk throughout the year, and there was a demand from both the home and foreign markets. Competition, however, reduced the prices of many articles to such an extent that there was but little profit either to the manufacturer or to the dealer. Manufacturers of rubber tires for motor vehicles suffered greatly from this cause. To meet the radical cut of one company it is estimated that it cost the German tire manufacturers millions of dollars. The unfavorable situation was still further accentuated by the great fall in the prices of crude rubber, which decreased the value of the stocks of raw material on hand in nearly all of the factories. Most of the companies were obliged to reduce their dividends as compared with 1910. The outlook for the present year can not be considered bright, not on account of lack of orders, but owing to the tendency of the manufacturers and dealers to cut prices.

The manufacturers of arms and ammunition were kept busy throughout the year. Orders at favorable prices were plentiful. As the specifications of the Government contracts are severe and are rigorously enforced, tenders for ordnance supplies are confined to the larger works with modern equipment, so that these concerns, comparatively few in number, can command good prices. The long and dry summer and autumn being favorable for hunting, the manufacturers of sporting guns and ammunition could hardly supply the demand. There were also large sales of air and Flobert rifles and weapons for defense and of ammunition for them. Notwithstanding the regulations in force in many of the towns and cities in Germany against carrying concealed weapons, it is reported that the sales of pistols were large.

Increased Sales of Toys, Instruments, etc.

Conditions were favorable throughout the year in the German toy industry. The production and consumption are increasing each year. The exports in 1911, amounting to 50,162 metric tons, reached record figures. Of the total 18,178 tons went to the United States and

12,156 tons to Great Britain. These two countries take over 60 per cent of the exports and about 50 per cent of the yearly production.

In the musical-instrument trade the business during the report year was good. The sales were larger than during any previous year.

In the china, porcelain, and glass industries conditions were favorable, although the prices were generally lower than during 1910. The exports in all lines increased, especially those to the United States.

The sales of meteorological, physical, and chirurgical instruments were larger than during 1910. The demands for barometers, registering apparatus, thermometers, etc., used by aviators increased greatly.

Activity of the Automobile Industry.

There was great activity displayed in the German automobile industry last year. Everywhere the factories worked under full pressure to fill orders and many of the plants were enlarged. The sales of the small and middle-sized cars were unusually large. One of the important factors which tended to increase the purchases of the cheaper cars was the reduction in the operating expenses, owing to the recent cut in the prices of pneumatic tires.

There is considerable improvement in the building of the small German motor cars. The manufacturers in many cases are using the same material as in the larger and more expensive automobiles. The small machines have 4-cylinder motors of 5 to 8 horsepower, four speeds, cardan drive, three-quarter elliptical springs over the rear axle, honeycomb radiators, all revolving parts except the motor mounted on ball bearings, throttle and often the advance spark lever attached to the inclined steering column, worm-type steering gear, and four-seated, comfortable bodies with glass wind shields and cape cart tops; in fact the low-priced cars are a close imitation of the regular touring automobile.

During 1911 both the exports and imports of motor vehicles showed material gains. The German foreign trade during the past two years was as follows:

Description.	Imports.				Exports.			
	1910		1911		1910		1911	
	No.	Value.	No.	Value.	No.	Value.	No.	Value.
Automobiles and chassis.....	1,229	\$2,293,856	1,244	\$2,342,634	3,390	\$6,930,660	5,136	\$10,057,642
Cycles.....	258	37,366	445	59,700	1,857	287,742	2,499	395,794
Motor cars, industrial.	67	193,018	134	390,082	225	627,368	345	973,658
Total.....	1,554	2,494,240	1,823	3,792,216	5,481	7,845,670	7,970	11,427,094

[The Bureau of Manufactures will issue shortly a monograph on the motor-vehicle trade in foreign countries.]

Increased Demands on the Electrical Industry.

Prosperity prevailed throughout all the branches of the German electrical industry during 1911. The factories were kept busy supplying the growing demands incident to the increasing uses to which electricity is being put. The extraction of nitrogen from air, the improving of the water supplies of cities by the use of ozone, wireless telegraphy, the electrification of trunk railway lines, etc., all

tend to increase the consumption of electric apparatus of various kinds. During 1911 a number of new electric power and light plants and electric railways were established and many of those already existing were extended. The activity displayed in certain localities in the building trade caused increased demands for electric materials for the installation of electric light, electric bells, etc.

One of the most fertile fields for the sale of electric apparatus lies in supplying the equipment used in the erection of central power stations for furnishing communities and the farmers with electric light and power. A German electric company is negotiating with the authorities of the Grand Duchy of Gotha to establish central power stations for the operation of electric narrow-gauge railways throughout the Duchy, and to supply the various towns and villages with electric power. The electric company assumes the obligation in the first four years to supply 7 cities and 34 communities and in the second four years the remaining districts. The contract is to run for 50 years from date of signing, the electric company to pay from 0.5 to 1 per cent of the gross receipts to the Government of the Duchy. A number of important central power stations have also been erected in Bavaria, to utilize the mountain reservoirs, in Wurttemberg, in Thuringia, and in Saxony, especially in the lignite districts. To prevent an open or disguised monopolization of the central power stations, the Governments of Prussia, Baden, Alsace-Lorraine, and other States have issued instructions regarding the contracts the different communities may make with the owners of the central stations.

Increased Use of Metal Filament Lamps—Railway Electrification.

The use of metal-filament lamps is greatly increasing. During the latter part of 1911 there was a disagreement among the manufacturers of the various styles of electric lamps which resulted in a material reduction of prices. At present the production of the metal-filament lamps is confined to the larger companies which own or control the patents or licenses necessary for manufacturing cheaply and efficiently. It is expected that the improvements which are constantly being made in the methods of producing will offset the 25 per cent reduction in prices and thus enable the manufacturers to realize more than the minimum profits which were earned last year.

As the experiments which have been made by the Prussian railway administration with electric traction on the main lines between Dessau and Bitterfeld have proved most successful, orders have been issued to extend the electrification to the trunk lines between Halle and Leipzig, Bitterfeld-Leipzig, Bitterfeld-Halle and Dessau, Dessau and Magdeburg, and Lauban and Königszell. The enlargement of the Muldenstein power works located in the Bitterfeld lignite district has already been commenced. This station alone will supply the high-tension alternating current for operating the entire system. There have been ordered from a works in Berlin two steam turbines, each capable of furnishing 5,000 to 7,000 horsepower, so that probably in 1913 all trains on the lines above mentioned will be drawn by electric locomotives. The whole system embraces about 192 miles. Steam traction on the urban and interurban lines operated in Berlin and its suburbs by the Prussian Government is to be changed to electric. The cost of making the improvement is estimated at about

\$29,345,000. To provide for the first payment, \$11,900,000 has been asked for in the Prussian budget for 1912.

The export trade in electrotechnical products increased considerably in 1911, notwithstanding the sharp competition of foreign manufacturers, the results of which are shown in the reduced values for larger quantities. In the report year the total weight of the exports was 106,114 metric tons against 90,421 tons in 1910, while the values were \$51,367,000 and \$51,931,800, respectively. There were increased shipments of dynamos, electric motors of all sizes, and material for electric lighting and power conveyance. The exports of lamps and electric cables decreased slightly. On the whole the financial results of the year's business were satisfactory.

Strikes and Lockouts.

Demand and supply in the labor market were better adjusted in 1911 than in 1910, with a resultant lower percentage of unemployment, as indicated by the decrease in the number of applications at the employment agencies. Strikes were more numerous than in the previous year, but they were isolated in great part and comparatively unimportant. Of the total number of strikes last year, 461 against 419 for 1910 were successful, 1,212 compared with 908 were partially successful, and 879 compared with 786 were unsuccessful. The number of plants affected by the strikes last year was 10,594, employing 593,779 workers. Of the lockouts last year, 69 were successful, 149 partially successful, and 11 unsuccessful.

A strike occurred in May among the Berlin printing pressmen, and an unsuccessful attempt was made to disregard the wage and arbitration agreement which was in force. Agreements between employers and employees were put to another test in the course of the more widespread lithographers' strike, and, as in the first case, were found adequate to control the situation. The other more important labor disturbances of the year occurred in the metal, textile, and tobacco industries. The strike among the makers of women's ready-made clothing in Berlin and a six-day lockout in the Berlin machinery factories involved 50,000 work people. Although these conflicts were in part severe, and the participants in some instances suffered, business was in no case prejudiced more than temporarily.

There was, however, frequently the danger that some single conflict would develop into a general disturbance extending throughout the Empire. This was especially true in the case of the series of strikes and retaliatory lockouts which prevailed in the Saxon and Thuringian metal industries from March into the summer. The success with which these disturbances were kept isolated is attributed to a growing recognition of the fact that the cessation of operations throughout an entire branch of industry involves an economic danger, the responsibility for which neither the employers' nor employees' organizations care to take upon themselves. An active effort was noted on the part of both the laborers and employers in the metal-industry disturbances to restrict the field of conflict to the place of its origin.

Increased Cost of Living.

There was a marked advance in the prices of almost every kind of food during 1911. Counting the average prices for the decade 1889 to

1898 as 100, the following are the relative averages for prices in main groups of products for 1909, 1910, and 1911:

Classes of products.	1909	1910	1911
Grains.....	119.05	106.55	112.02
Other domestic agricultural products.....	120.05	121.77	140.00
Foreign agricultural products.....	111.90	111.92	124.48
Animal products.....	128.84	142.06	136.68
Textile products.....	124.29	131.77	138.77
Minerals.....	118.76	121.17	131.11

The general index price for 39 articles was 5,148 in 1911 as compared with 4,662 in 1910 and 4,724 in 1909.

Among the direct results of this sharp advance in the cost of the necessities of life were a marked increase in the number of cooperative distributive societies, a wider extension of the system of wholesale purchase through central agencies, and the direct sale of food at cost by municipalities. The city of Berlin inaugurated in October the sale of fish on certain days of the week in the public market halls, and the plan has been a great success. The fish are purchased by the city at Geestemunde, one of the important coast markets, and are sold at cost plus 5 to 6 marks (\$1.20 to \$1.43) per 100 kilos (220.4 pounds) to cover cost of transportation, etc. It was reported by one of the local newspapers on October 10 that the city was selling halibut at 31 pfennigs (7.3 cents) a pound, while the private dealers asked 35 pfennigs (8.3 cents) for it, cod at 24 pfennigs (5.7 cents) as compared with 35 pfennigs, and flounder at 24 pfennigs as compared with 30 pfennigs (7.1 cents). The sale by municipalities of potatoes and other vegetables, the prices of which were especially affected by the drought, was general.

Financial Conditions.

During a part of the two middle quarters of 1911 financial conditions in Germany were disturbed by the unsettled state of foreign affairs. The nation's financial resources, however, were fully equal to the situation. The discount rate of the Imperial Bank at no time went above 5 per cent, and the average for the year was 4.397 per cent, compared with 4.346 in 1910.

One of the few noticeable results of the international situation was a decrease in the amount of new capital invested in the larger industrial and commercial undertakings. There was a marked increase in such investments in the last quarter, but it was not sufficient to overcome the earlier inactivity and bring the figures up to those of 1910. In all 169 new companies, having an aggregate of \$55,700,000 worth of common stock, were organized under one or the other of the two corporate forms most generally employed for large undertakings—"Aktiengesellschaft" and "Kommandit-Gesellschaft auf Aktien," that is, joint-stock companies. This was a decrease of 17 in the number of new companies and of \$5,300,000 in the amount of common stock as compared with 1910. Among the existing companies there was a net aggregate increase of capital stock during 1911 of \$10,000,000 as compared with \$11,500,000 in 1910. On December 31, 1911, there were 5,340 joint-stock companies with an aggregate nominal capital of \$3,832,500,000 doing business within the Empire.

In the larger field of small undertakings, however, there appears to have been increased organizations compared with 1910. There were

4,051 new companies, organized as "Gesellschaften mit beschränkter Haftung," or limited liability companies, the corporate form most in vogue in the domain of medium and small scale business, registered during 1911, with an aggregate nominal capital of \$95,000,000, as compared with 3,872 and a nominal capital of \$80,000,000, in 1910. Among existing companies of this kind there was a net increase in nominal capital of \$20,500,000 in 1911 as compared with an increase of \$18,100,000 in the previous year. On December 31, 1911, there were within the Empire 22,179 limited liability companies, with an aggregate nominal capital of \$1,006,600,000. There were 3,132 companies, with a nominal capital of \$164,000,000, in course of liquidation at the end of the year, and 731, with an aggregate nominal capital of \$36,500,000, in bankruptcy. These numbers are somewhat larger than for the corresponding date in 1910, but not more so than is accounted for by the increase in the total number of companies doing business.

Banking Operations.

The last provision of the imperial bank law of 1909 went into effect on January 1 of last year. It increased the tax-free note contingent of the Imperial Bank from \$112,600,000 to \$130,900,000 in normal times and to \$178,500,000 at the ends of quarters when settlements are especially heavy, thus placing that institution in a better position to meet current domestic credit needs. It is said in some quarters that even this enlargement of the circulation is not adequate to satisfy the requirements of the nation's rapidly expanding business, as there were only two occasions during the last quarter of the year when the actual issue of notes did not exceed the enlarged tax-free quota. Referring to this and other circumstances, the president of the Imperial Bank insisted at frequent intervals toward the close of the year on the necessity for exercising greater caution in the creation of credit, and the annual report of the bank dwells rather in detail on the crisis of last summer and the dangers of inflation. The annual reports of the private banks, on the other hand, place emphasis rather on the assurances which may be drawn from the successful handling of that situation, and their tone is in general optimistic. The report of the "Discontogesellschaft" asserts that the continuing increase in domestic credit demands is not unhealthy but rather a natural consequence of the growth of population and the development of industrial and commercial activity.

As a result of their 1911 business the eight leading German banks paid an average dividend of 8.82 per cent on an aggregate capital stock of \$283,000,000 as compared with 8.77 per cent in 1910 on an aggregate capital stock of \$274,000,000. In no single instance was a less dividend paid than in 1910. Among the banks which added to their share capital in the course of the year were the Discontogesellschaft, the Mitteldeutsche Kreditbank, the National Bank für Deutschland, and the Barmener Bankverein, an associate of the Discontogesellschaft and now the largest provincial bank in the Empire.

Activity on the Bourse.

There was more than usual activity on the bourse during 1911, as shown by the fact that the stamp duty on bourse transactions produced \$357,000 more than in 1910. New emissions of stock were

many during the first semester. During the late summer and fall, however, concurrently with the Morocco negotiations, somewhat of a stagnation set in, with the result that the total volume of new emissions for the entire year proved to be less than at any time since 1907. By December, however, most of the losses had been made up and some actual gains effected. The Frankfurter Zeitung approximates the total value of 1911 emissions at \$587,200,000, as compared with \$621,700,000 in 1910 and \$766,900,000 in 1909.

On the average the 1911 quotations for German Government bonds were 1.72 per cent less than those recorded in 1910. The chief reason assigned for this decline is the large amount of loans floated in previous years, coupled with a fear that the former practice of borrowing without providing for amortization may be reinstituted. With a view to remedying the situation, a bill, modeled after an Italian law which requires savings banks and like institutions to invest the greater part of their funds in Government securities, has been introduced in the Prussian Diet.

Government Finances.

As a result of the financial reform instituted in 1909, the 1911 budget, it is estimated, will show a surplus of \$55,000,000, compared with a deficit of \$5,470,000 for 1910, and \$35,700,000 for 1909. The Prussian Government finances are in equally healthy condition.

No new funded loans were made by either the Imperial or Prussian Government during 1911. There was only a \$20,000,000 issue by Prussia of short-time treasury notes, a considerable portion of which, it is interesting to note, was taken up in the United States. On January 18, 1912, however, new imperial and Prussian bond issues, valued at \$19,040,000 and \$99,960,000, respectively, bearing 4 per cent interest and redeemable April 1, 1918, were floated under the direction of the Imperial Bank and the Prussian State Bank. The price was 101.40 marks (\$24.13) and for registered bonds not transferable before January 15, 1913, 20 pfennigs (4.8 cents) less. The proceeds of the imperial issue are to be used to take up a part of an issue of treasury notes which fall due July 1, 1912; and the proceeds of the Prussian loan for remunerative investments, the chief of which will be the electrification of the Berlin city and suburban railway lines.

Amendment of German Patent Law.

The amendment to section 11 of the German patent law, relative to the working of patents in Germany, went into force on July 1 of last year. According to the previously existing law, a patent could be withdrawn if the owner had not manufactured the patented article in Germany, or at least had not made proper efforts to do so, within three years of the granting of the patent. Under the amended law, a patent may be withdrawn only when it is proved that after three years from the time of granting the patented article is being manufactured exclusively or chiefly outside of Germany and the colonies. But, when the owner, after a similar lapse of three years, having been offered adequate compensation and sufficient guaranty, has refused permission to another to use his patent, such refusal being contrary to public interest, the right to utilize the invention may be granted to that other under compulsory license (zwangslizenz).

American owners of German patents are not affected by the new law, by reason of the convention of February 23, 1909, between the United States and Germany, which relieves them entirely of the necessity of working their German patents. The situation was discussed at length in a report published in the Daily Consular and Trade Reports for May 31, 1911.

Of the 44,929 patent applications received at the German patent office last year, 1,929 were from Americans, the highest number received from any foreign country except France, which was credited with 1,943. Of the 54,444 applications for utility model patents, 1,073 were from Americans and 700 from Great Britain and colonies. Since the enactment of the present trade-mark law in 1894, 153,140 trade-marks have been registered, of which 917 were by American firms.

Trade with United States.

The detailed corrected values of the various articles embraced in Germany's trade with the United States in 1911 have not yet been published, but to indicate the character of the goods the following statement shows the principal imports in metric tons of American goods for the past two years, compiled from the provisional statistics:

Articles.	1910	1911	Articles.	1910	1911
	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>
Agricultural implements.....	19,199	19,567	Machines, metal-working.....	3,220	4,194
Breadstuffs:			Malt and fruit grains.....	57,567	63,293
Buckwheat.....	6,525	1,037	Oil cake and meal.....	196,750	207,907
Corn.....	108,338	143,100	Oils:		
Flour, wheat.....	3,749	4,939	Benzine.....	46,179	76,333
Wheat.....	168,584	301,722	Corn and other fatty oils..	2,081	5,545
Copper, raw.....	159,346	171,763	Cottonseed.....	8,521	12,600
Cotton:			Lubricating.....	105,379	110,971
Raw.....	279,850	336,138	Petroleum.....	787,166	745,302
Linters.....	14,115	17,147	Paraffin, crude.....	6,424	6,678
Feed stuffs.....	106,139	180,963	Phosphates.....	298,359	378,770
Fruits:			Provisions:		
Apples, fresh and dried...	14,467	21,276	Lard.....	53,109	91,914
Apricots and peaches,			Oleomargarine.....	17,282	23,645
dried.....	2,589	2,174	Premier Jus.....	4,982	6,721
Prunes.....	15,514	4,570	Tallow.....	2,107	3,019
Furs.....	1,574	1,713	Typewriters and adding ma-		
Gum, turpentine.....	89,993	83,619	chines.....	228	275
Hides and skins.....	5,835	5,366	Wood, lumber.....	442,696	405,397
Lead and lead waste.....	20,331	35,843			

As shown by the advance official statistics, the value of the imports into Germany from the United States, Philippine Islands, and Porto Rico during 1911 was \$320,935,860, as compared with \$283,571,764 in 1910.

Declared Exports to United States.

The value of exports from Germany to the United States, Philippine Islands, and Porto Rico in 1911, as shown by German official statistics, was \$153,938,162, against \$152,420,912 in 1910, while the value of shipments to the United States, Hawaii, Philippine Islands, and Porto Rico, declared at the various American consulates during 1911, was \$171,935,884, as compared with \$171,652,448 in the previous year. The exports to the United States proper were valued at \$168,630,821 and \$168,157,697 for 1911 and 1910, respectively.

The difference between the values as given by the German official statistics and those declared at the American consulates is that the

former is based on unit values calculated according to the average prices which prevailed during the year for which statistics are given, and do not include the exports to Hawaii. The American values are based on the actual values in the principal markets of the country whence exported at the time shipped to the United States. The foregoing declared values also include exports of precious metals to the United States, the German figures for which have not yet been published.

The principal articles of export from Germany to the United States during 1910 and 1911 were as follows, in metric tons:

Articles.	1910	1911	Articles.	1910	1911
	Tons.	Tons.		Tons.	Tons.
Alizarin.....	1,201	528	Post cards.....	1,296	971
Alloys, iron.....	15,173	6,646	Potash:		
Aniline, etc.....	11,688	12,271	Magnesia.....	92,415	143,775
Anthracene, cresote, etc..	30,564	13,900	Muriate of.....	180,590	229,240
Beer and malt extracts in			Sulphate of.....	39,793	56,970
casks.....	1,748,993	1,846,419	Potato starch.....	3,301	2,008
Beet sugar.....	9,579	4,042	Rags.....	30,605	34,528
Cellulose.....	44,014	40,369	Rails.....	2,397	4,573
Cement.....	14,111	20,663	Rice.....	4,235	2,907
Chloride of lime, bleach-			Silk trimmings, etc.....	1,065	1,139
ing dyes, etc.....	10,241	8,467	Stockings, cotton.....	2,704	1,785
Clay, kaolin, etc.....	19,517	14,265	Stone and porcelain ware.	18,261	18,230
Coke.....	51,935	15,268	Sugar-beet seed.....	2,583	4,424
Cutlery.....	890	763	Thomas meal, etc.....	30,780	28,197
Dextrin.....	2,297	1,338	Tin and alloys.....	2,159	1,777
Feldspar, etc.....	13,389	9,512	Toys.....	17,692	18,178
Glass and glassware.....	7,596	6,813	Wine:		
Hope.....	1,433	1,103	Champagne, in bottles	10,319	8,320
Indigo.....	3,489	2,951	Still.....		
Kieserite.....	721,246	642,573	In casks.....	2,212	1,617
Musical instruments.....	1,961	2,295	In bottles.....	2,170	2,296
Oil and grease, palm.....	10,321	14,911	Wood alcohol.....	3,486	4,319
Paper, manufactures of....	14,232	12,687	Wool cloth.....	1,385	633
Pearled grain, etc.....	25,445	17,126			

¹ Gallons.

BRITISH TOWN PLANNING.

[From the London Times.]

A proposal has been made, and is now receiving influential support, for establishing a professorship of town planning at London University. The idea originated with Mr. John Burns, who suggested at the town-planning exhibition, held at Crosby Hall some time ago, that some wealthy person should endow such a chair; and since then Mr. Herbert Warren, of the Garden City Association, has several times urged its desirability. The matter was at first referred to the executive committee of the association and now a strong committee is being formed to further it.

The recent conference on town planning showed that there is among the local authorities of the country a great deal of keen interest in this subject. Enthusiasm for the movement, indeed, very often outstrips the knowledge of the principles of town planning, which is natural, seeing that those who are at present the technical advisers of the borough and district councils had no opportunity of studying the new theory and practice of town planning when they were preparing for their careers as architects or surveyors. It is for this reason that the creation of the proposed chair at London University is now being urged. It is intended, if the proposed chair is founded, that architectural students should have the opportunity of attending the lectures on town planning as part of their professional studies. Instruction is already given in this subject at Liverpool University by Prof. Adshead and at Birmingham by Mr. Raymond Unwin, and it is strongly felt that students in London should have the same facilities. Sir Philip Magnus, M. P. for London University, Sir William Collins, and Sir Henry Miers, the principal, have expressed great interest in the scheme. It is supported also by Sir Aston Webb, R. A., and Mr. John Burns has offered several valuable suggestions. A professorship at London University should have an endowment of \$3,000 a year, and a lectureship of \$1,500.

BRITISH WIRE-FENCE MARKET.

[From Consul General John L. Griffiths, London.]

Wire fencing is being more and more used in this country as timber becomes scarcer, and this is especially true of railways. Galvanized wire netting and fencing wire is being extensively employed for farm and park fences. The following are some of the retail prices, per roll of 50 yards, which obtain in England for galvanized wire netting:

Mesh.	Gauge.	Price.		
		18-inch.	30-inch.	78-inch.
1 inch.....	19	\$1.75	\$3.14	\$6.29
1 inch.....	18	2.13	3.83	7.66
1½ inches.....	18	1.40	2.47	4.91
2 inches.....	18	1.09	1.93	3.83
3 inches.....	18	.79	1.42	2.77

Patent mixed-mesh wire netting sells, per roll of 50 yards, for \$2.19 to \$3.50 for 1½-inch mesh combined with 2½-inch mesh, 18 inches of former and 12 inches of latter, 18 gauge, with a width over all of 30 inches; up to 24 inches of 1½-inch mesh and 30 inches of 2½-inch mesh, and a width over all of 54 inches.

Fencing Wire.

Seven-ply galvanized strand fencing wire is priced:

	No. 3.	No. 6.	No. 7.	No. 8.
Approximate number of yards, per hundredweight.....	260	465	546	699
Price per hundredweight.....	\$3.83	\$4.20	\$4.34	\$4.63

Plain galvanized fencing wire is considerably cheaper. Galvanized barbed wire, 2 or 4 point, ordinary or thickset, brings \$3.22 per hundredweight (about 540 yards.) Ornamental garden border hurdles, frames 1 by ½ inch, upright rods ½ inch diameter, 3 inches apart, center to center, are quoted as follows, per yard: 12 inches high, 48 cents; 15 inches high, 49 cents; 18 inches high, 51 cents; 21 inches high, 53 cents; 24 inches high, 55 cents.

Branch House in England.

I am strongly of the opinion that American firms would serve their interests much better if, after deciding the question of entering this market, they will establish a branch agency in some central city, such as London, Birmingham, Manchester, or Liverpool, so that they may keep a stock on hand, and so that they may have a representative who will devote his whole time and energy to the exploitation of the market for their article. I am inclined to think that they will meet with rather keen competition, and for this reason it is all the more important that they have a representative whose interests are wholly identified with their own.

[A list of British steel and iron wire manufacturers, wire fence manufacturers, mechanical engineers (millwrights), wire drawers, and wire fencing agents, supplied by Consul General Griffiths, may be obtained from the Bureau of Manufactures.]

SYRIAN APRICOT PASTE.

[From Vice Consul General F. Willoughby Smith, Beirut.]

In view of the abundant apricot yield on the Pacific coast, it might be of profit to American farmers in that region to utilize that portion of the yield which is too ripe, or is otherwise unfit for transportation to the fruit markets or canneries, in the manufacture of apricot paste, known in Syria as kamereddin.

This industry has long been in vogue at Damascus and all along the valley of the Barada River. The methods employed are very simple. A basin 2 or 3 feet deep and of a circumference proportionate to the crop to be treated, is dug by the farmer and usually lined with cement. The ripe apricots are stoned and thrown into this basin and beaten into a pulp with tampers. The primitive method of kneading the fruit with bare feet is still often resorted to. The pulp is then spread out on thin boards and placed under trees and in shady places to dry. These boards are of uniform size, and the paste is so spread out as not to be thicker than one-tenth of an inch when dry. The sheets thus manufactured when dry weigh 1 rottle (about $5\frac{1}{2}$ pounds) and look like sole leather.

The price varies with the quality, which is determined by the color and thickness: First quality—clear yellow color and large thin leaf, price 26 to 28 cents per $5\frac{1}{2}$ pounds; second quality—dull color and thicker leaf, price 25 to 26 cents per $5\frac{1}{2}$ pounds; third quality—dull color and fibrous paste, price 23 cents per $5\frac{1}{2}$ pounds.

Production and Exports—Apricot Jam.

The annual production of this paste reaches about 4,000 tons, and is increasing yearly.

There is a large market for kamereddin throughout Syria, but of late years considerable shipments have been made to Egypt, Turkey, Roumania, and Germany. The exports in 1910 amounted to about \$150,000. The "leaves" are rolled for export and are packed in cases of 30 to 39 rolls.

In Germany, I am informed, kamereddin is imported for the manufacture of jam, which has the full apricot flavor. The leaves should be soaked for 24 hours in a small quantity of water. The water and apricot paste should then be well blended and put to boil with the required amount of sugar.

The orchardist can produce this paste on the farm and, with little cost and labor, place on the market an article which is easy to ship and which meets a growing demand. In Syria this product is a substitute for candy and is eaten in its original form. It is also made into a sirup and forms the chief ingredient of the many iced drinks served in the native houses. A valuable by-product is obtained in the kernels.

A Mexican Piano Tuner's Travels.

A piano tuner of Hermosillo travels all over the Mexican State of Sonora, also in Chihuahua, Sinaloa, and Tepic. Consul Louis Hostetter suggests that he might also sell American musical goods to advantage. The address of this man and other dealers in pianos in Hermosillo may be had from the Bureau of Manufactures at Washington.

SERVIAN PRUNE JAM.

[From Consul Maddin Summers, Belgrade.]

Prune jam is produced in Servia in large quantities, the output depending on the plum crop. These last two years the crops were under the average, while in 1909 there was none at all. In 1911 only about 1,200 to 1,500 tons were produced and the prices reached an unprecedented height. Purchasers had to pay as high as \$13.40 per 100 kilos (220.46 pounds) f. o. b. Servian stations the past season, whereas in former years prices ranged from \$3.65 to \$6.50 per 100 kilos, including the casks, which usually contain 150 to 200 kilos (330.69 to 440.92 pounds).

The jam is made from fresh, so-called green plums. The fruit is pitted by hand and cooked in big copper kettles. Some makers cook it in the open air, in which case the product is sometimes damaged by bad weather. The jam does not contain any foreign mixture and is absolutely pure when it leaves the warehouse of the makers. It must be free from pits and not burnt. This is usually guaranteed by the makers when the sale is made. It requires long experience to produce a good quantity and quality from a given amount of fruit. The section around Kragoujevatz is known for the best product. The jam must be of a dark color. When it has a reddish tinge it is inferior in quality. It must also be thick and firm, as this is proof that it is properly cooked. Thin and liquid prune jam is inferior. The jam is packed in new casks either with iron or strong wooden hoops so that it can stand long transport.

The greater part of the Servian product is taken by Germany, part going to Austria-Hungary when the Bosnian crop does not cover the demand. The total exports of Servian plum preserves in 1909 and 1910 were valued at \$92,176 and \$568,699, while exports of dried plums were valued at \$433,773 and \$2,102,262, respectively. The amounts of plum jam taken by the United States for the past three years in value has been as follows: In 1909, \$14,388; 1910, \$27,923; 1911, \$9,228; and in 1912, up to June 1, \$4,425. The prices for the present year have ranged from \$15.60 to \$16 per 100 kilos. The freezing weather damaged the crop severely this year and still higher prices are anticipated. Shipments to the United States are usually made by firms in Budapest. American buyers have never tried to purchase the jam in the market direct.

COTTON PRODUCED IN THE NIGERIAS.

[From Consul W. J. Yerby, Sierra Leone, West Africa, May 11.]

The purchases of cotton in Lagos up to March 23, 1912, were 3,969 bales, as compared with 3,207 bales to the end of March, 1911, and 2,425 bales for the first three months of 1910. The purchases in Northern Nigeria up to the present amount to 1,000 bales, and it is estimated that at least a further 1,000 bales will be purchased before the end of the season. This result is very satisfactory, in view of the fact that previous to this season there have been no adequate transport facilities in Northern Nigeria, and there is every reason to believe that within the next two years 10,000 bales of cotton will be produced in the colony. The average weight of the bale is 400 pounds.

COMMUNICATION BETWEEN UNITED STATES AND RUSSIA.

[From Consul Jacob E. Conner, St. Petersburg.]

One of the greatest hindrances to traffic between the United States and Russia has always been the lack of direct communication. This affects both passenger and freight traffic adversely. For the former it results that comparatively few Americans come here, notwithstanding that the few who do come are generally favorably impressed with what they see and the majority are probably astonished to find themselves disabused of long-standing misconceptions.

Three routes of travel are usually followed in reaching this city: First, the northern route from Stockholm by water either to Abo or Helsingfors, Finland, and then by rail to this city, or else direct from Stockholm by water to this city. This is the route followed by tourists who take the Norway trip, and has the advantage of a pleasant sea voyage among the lovely islands of the Gulf of Bothnia and the further advantage of escaping a long detention or any other annoyance at the frontier, since one may thus reach the frontier at St. Petersburg.

The second, or Paris-St. Petersburg route, divides at Berlin, the shorter line crossing the frontier at Eydtkuhnen-Wirballen (Vershobolovo), the longer passing southward through Warsaw and crossing the frontier at Alexandrovo. The time from Paris to St. Petersburg is 48 hours by the Nord-Express and only a few hours longer by the other trains. Railway travel in Russia on the main lines is as comfortable as can be found anywhere; but precaution must be taken to order sleeping-car accommodations in advance.

The third route is direct from New York to Libau by the Russian-American Line, by which it is possible to make the entire distance from New York to Libau in 10 days and to St. Petersburg in 11 days. There are three steamers of this line, making the trip fortnightly, and they are equipped, according to the statement of the company, with "wireless telegraphy, submarine signals, and solid comfort."

Forwarding Merchandise.

For the shipment of freight the New York-Libau route is the only direct one in existence. Complaints are continually coming to this office of the delays caused by transshipping at Hamburg and elsewhere by other lines. A shipment of Government supplies destined for this American consulate well illustrates this point. It left New York March 14, reached Hamburg about March 25, was forwarded on April 6 via Revel, which port was at that time closed by ice. This office was advised on April 11 by the local agent that the shipment "was expected," and it is still (May 1) on the way. By direct route mentioned this shipment could have arrived in two weeks, or about one-fourth of the time at least, as above required.

State Railway Operations in Denmark.

Consul General E. D. Winslow, of Copenhagen, advises that the fiscal year for the Danish State railways (April, 1911, to March, 1912) indicates gross receipts of \$12,000,000. Passenger traffic brought in \$5,500,000 and freight traffic yielded \$6,500,000. The receipts show an increase of nearly \$900,000 as compared with the previous fiscal year. The passenger and freight rates have been slightly increased and better financial results may be expected next year.

COMBINATION OF SWEDISH TOBACCO MANUFACTURERS.

[From Consul Douglas Jenkins, Gotenborg.]

A large number of the tobacco manufacturing companies in Sweden (more than 60 per cent, it is reported) have combined under the name of Aktiebolaget Förenade Svenska Tobaksfabriker. The new corporation is to have a capital of 17,000,000 kronor (\$4,556,000), including both preferred and common stock. The stock was oversubscribed more than three times, and at par value. The managing director of the new company is Theodor W. Jeansson. The combination includes all kinds of tobacco factories. Some of the large concerns, however, have not taken part in the formation of the new company, notably one of the most important snuff manufacturers, which has an output equal to one-twelfth of total output in the country.

The 35 factories in the combination have an aggregate annual output of about \$3,300,000. Among numerous reasons given as a cause for the formation of the new corporation, one of the most important is the rather unsatisfactory condition of the business generally in recent years. It is also pointed out that the combination will be in a position to reduce greatly the operating expenses, and, if need be, close down and abolish entirely certain plants. Reductions in selling costs and freights are also anticipated.

The formation of this so-called "trust" has been the subject of much discussion in the Swedish newspapers. It is the third to be formed in this country, the sugar and cement combinations being the preceding ones.

The tobacco industry is not subject to any special form of taxation in Sweden—such, for instance, as the revenue-stamp tax in operation in the United States. Recently, however, the Government has had the question of a special tax in the form of an excise duty under consideration. In fact, the taking over of the tobacco industry entirely by the Government has been advocated in some of the newspapers and by certain public men.

USE OF PUTTY POWDER IN ITALY.

[From Consul Frank Deedmeyer, Leghorn.]

Putty powder (pote pulvere) is used in Italian statuary studios and is imported by the largest consumers and by druggists from Marseille, France. Druggists sell it at a minimum price of 10 lire (\$1.93) per 1,000 grams (32.15 ounces). About 275 pounds of putty powder is used in this district annually. The marble polishers report that they now use little of it, as "acide ossalico" and plumbago are much cheaper and quite effective as substitutes. Though, for special work, where a very hard polish is desired, a little of the putty powder is mixed with the ingredients named. Putty powder of American manufacture has been used at Carrara, but it is claimed that it costs more than the French article. [The names of the largest users of putty powder may be had from the Bureau of Manufactures at Washington.]

Oranges are being purchased by Germany in increasing quantities, imports for the first three months of 1912 amounting in value to \$3,309,000, representing the equivalent to 925,000 American boxes of 85 pounds each.

PROVISION TRADE IN MEDITERRANEAN.

[From Consul James Oliver Laing, Valetta, Malta.]

Certain customs exist in the food and provision trade in Malta, a knowledge of which would be of value to an American firm entering business here.

Most of the business is done on commission, and generally c. i. f. Malta. The local merchants prefer such a quotation. As there is almost no direct communication between New York and Malta, goods ordered by letter from Malta (about 11 to 14 days) might be sent via any one of half a dozen ports and the cost might vary considerably. Thus, goods are sometimes transshipped in Liverpool, sometimes in Antwerp, Hamburg, Marseille, or Naples. The Maltese merchant has some difficulty in figuring the total cost to him. Agents here do not like to give the cost of freight and handling, even when the route is known, without communicating with the port of departure in the United States, as it sometimes happens that rates from the United States to Malta differ from rates by the same route from Malta to the United States. It is advisable, for these reasons, to quote prices c. i. f. Malta. The freight rate from England on the classes of goods under discussion varies from 20s. to 25s. (\$4 87 to \$5.48) a ton.

Bacon imported into Malta is usually "cured middle cut." Each piece usually weighs 22 to 26 pounds. Hams are smoked and weigh 10 to 12 or from 12 to 14 pounds each. Lard arrives usually in tubs, although I have seen cans also. The tubs weigh 28 pounds each. Cheeses are pale or colored and weigh 64 to 70 pounds each. All these goods are quoted per hundredweight (112 pounds).

Canned fruit is usually the whole fruit. All kinds of canned fruit are imported, particularly peaches, pears, apricots, and pineapples. Canned asparagus is also in demand. The cans of fruit most in demand weigh about 2½ pounds each. They come here packed 24 cans in a case. Most of these canned goods are brought from England. Were American merchants to get into direct connection with commission merchants here it would reduce the cost to the Malta merchant and I believe would increase the sale of American goods. [A special list of Malta commission agents may be had from the Bureau of Manufactures.]

NEW LIFE-SAVING JACKET.

[From Consul General John L. Griffiths, London, England.]

A public test was recently carried out in the Thames of the Carroll life-saving jacket. During the demonstration this apparatus was used by a lady and three men. The garment consists of a loose sack, about the length of an ordinary lounge jacket, having a ribbing fitted with a substance of greater buoyancy than cork. It is so constructed that the heads of the users are completely out of the water, thus permitting them to take food while in the water.

The Vancouver Exhibition will be the largest of the next fall fairs to be held on the mainland of British Columbia, and Vice Consul General G. C. Woodward sends a booklet giving the prize list, which is filed for public reference at the Bureau of Manufactures.

OPERATIONS OF BRADFORD CONDITIONING HOUSE.

[By Consul Augustus E. Ingram.]

A revised edition of the regulations governing the operations of the Bradford conditioning house was recently issued [copy of which was transmitted to the Bureau of Manufactures]. The handbook contains in addition to the general information as to the testing instructions, charges, reception of goods, etc., an interesting description of the various tests for moisture, fatty matters, etc., of yarn, counts, and strength of yarn and cloths, measurement of piece goods, analyses of cloth, approximate proportions of various fibers in yarns and fabrics (by means of dissection and classification and verified by chemical tests and microscopical examinations), etc. A statement of standard regains and allowances for moisture, etc., is also given as established at Bradford and various Continental conditioning houses, together with table of results and regains, worsted counts of yarn in the single, and various systems of counting yarns.

The weight of goods passed through the Bradford conditioning house for testing purposes in 1911 amounted to 96,070,738 pounds, and the number of tests was 237,967.

ENGLISH ELECTRICAL INSTRUMENTS.

The Bureau of Manufactures has issued a monograph dealing with the manufacture of electrical instruments in England, as a result of the investigations of Commercial Agent H. B. Brooks, in which the works of seven leading electrical firms are described in detail. In discussing the labor conditions at each of the shops, the number of employees, the hours of labor, the wages paid, and the relations existing between organized labor and the employers, etc., are all dealt with. Much attention is given to the equipment of the shops, and a number of novel installations are described. More space is devoted to the nature of the products than to any other feature, and some of the new instruments are described at some length. The country of origin of the materials used in the manufacture of instruments and the markets for the finished products are given. A section is included on the use of electrical switches in England, with suggestions for the introduction of American goods, and the final chapter is devoted to the seventh annual exhibition of the Physical Society of London. Copies of the book may be had free on application until the bureau's supply is exhausted.

SALINA CRUZ A COMMERCIAL PORT.

The Department of State is in receipt of a note from the Mexican ambassador at Washington stating, in behalf of his Government, that the President of Mexico has directed that Salina Cruz shall hereafter be considered a commercial port [Salina Cruz is the western terminus of the Tehuantepec Railway.]

In explanation of the term "commercial port," the ambassador states:

The phrase "commercial port" is used in contradistinction to "military port," as the Government of Mexico has decided not to fortify the port of Salina Cruz for the present, notwithstanding that heretofore and under the administration of President Diaz some work had been done at that port preparatory to its fortification.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 697. Navy Department supplies.**—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until July 9, 1912, for the following supplies; firms interested therein should make application to the Bureau of Supplies and Accounts, giving the schedule numbers desired: Schedule 4645, watch mark braid; schedule 4644, wire lamp guards, safety matches, white-wood fiber plaster, salt-water soap; schedule 4643, battle lanterns, nonwatertight portables, semifinish steel bolts and nuts, steel machinery nuts, soft sheet copper, crude petroleum; schedule 4640, galvanized steam wrought pipe, galvanized and black wrought pipe, flat medium steel, galvanized sheet steel, asphaltum varnish, dammar varnish; schedule 4638, plow steel hoisting wire rope, copper tubing, name plates, tool steel; schedule 4647, cotton waste; schedule 4646, steel conduit, brass conduit, steel and iron conduit fittings, brass conduit fittings, brass goose-necks, insulator hangers, clamp porcelain insulators, galvanized pipe straps, galvanized-iron malleable unions, brass unions, brass washers; schedule 4641, steel bolts and nuts, spur rim rolled brass grommets, hardware, reversible mortise locks, rim locks for metal doors; schedule 4642, white cedar, Oregon pine, white pine, yellow pine, redwood for pattern making, white spruce; schedule 4636, mild rod steel; schedule 4639, structural steel, structural angle steel; schedule 4648, alcohol in tank cars, white lead in oil.
- No. 698 Brick dormitory and water system.**—Proposals will be received at the Indian Office, Washington, D. C., until June 20, 1912, for furnishing materials and labor for the erection of a brick dormitory and installation of extension to water system at the Cut Bank Boarding School, Blackfeet Reservation, Mont., in strict accordance with the plans, specifications, and instructions to bidders, which may be examined at the Indian Office, the office of the supervisor of construction, Denver, Colo., the United States Indian warehouses at Chicago, Ill., St. Louis, Mo., and Omaha, Nebr., the Builders and Traders' Exchange at Minneapolis, Minn., and at the school. For further information apply to the Superintendent of the Blackfeet Indian School, Browning, Mont.
- No. 699. Sidewalks, curbs, etc.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until July 1, 1912, for sidewalks, curbs, etc., at the United States post-office building, Beverly, Mass., in accordance with the drawing and specification, copies of which may be obtained from the superintendent of construction of the building, room 144, Post Office and Subtreasury Building, Boston, Mass., or from the Supervising Architect.
- No. 700. Earth mounds and grading.**—Proposals for earth mounds and grading at the new target range, Naval Academy, Annapolis, Md., will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until June 22, 1912. Specifications can be obtained on application to the bureau.
- No. 701. Post-office equipment.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until July 18, 1912, for the mechanical equipment (except freight elevator and lift) of the United States post office at Jersey City, N. J., in accordance with drawings and specification, copies of which may be obtained at the office of the superintendent of construction, Jersey City, or from the Supervising Architect.
- No. 702. Gasoline engine and parts.**—Sealed proposals for the purchase of gasoline engine and parts, removed from the United States launch *St. Helena*, will be received at the United States Engineer Office, room 325 Customhouse, New Orleans, La., until June 22, 1912. Information on application to Lansing H. Beach, Lieutenant Colonel, Engineers.
- No. 703. Vent stacks.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until July 16, 1912, for increasing the height of the vent stacks at the United States post office and courthouse, Grand Rapids, Mich. Copies of specifications can be obtained of the custodian of the building or from the Supervising Architect.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

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No. 145

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FOREIGN TARIFFS.

BELGIUM.

[From Belgian Customs Circular No. 3000.]

New Specific Rates of Duty.

The following specific rates of duty, provided for by the decree of August 14, 1911, went into effect in Belgium June 1, 1912, replacing the former ad valorem rate of 12 per cent on toilet soap:

[Kilo=1,000 grams=2.2046 pounds. Franc=\$0.193.]

Tariff No.	Articles.	Duty.
Ex 50....	Toilet soap:	Francs.
	Ordinary soap.....100 kilos.....	7
	Soap creams, hard soap for shaving, liquid soap and powdered soap, imported in small containers (boxes, tubes, cases, small bottles, jars, etc.) weighing not more than 250 grams.....100 kilos.....	60
	Soap creams and liquid soap, imported in containers weighing more than 250 grams.....100 kilos.....	30
	Medicinal soap.....do.....	40
	Soap in bars or round cakes, imported in boxes containing not more than three pieces; soap in [fancy foil or paper] wrappers and in leaf form.....100 kilos.....	40
	Toilet soap not specially mentioned.....do.....	18

NOTE.—The articles specified above are dutiable without tare allowance for the immediate containers, such as cardboard, paper, foil, and other wrapping. In assessing the duty, however, allowance is made for the weight of the wooden packing case, etc.

"Ordinary soap" includes plain, unscented soap, which may be used also for toilet purposes.

BULGARIA.

[From Minister John B. Jackson, Bucharest; see also Daily Consular and Trade Reports for May 17, 1912.]

Regulations for Admission of Edible Cottonseed Oil.

The Bulgarian Government, on May 4, 1912, promulgated the following regulations for the admission of edible cottonseed oil, as provided for in a recent law:

Cottonseed oil shall have the following qualities: It shall be clear, almost odorless, yellowish in color, with taste similar to that of walnut oil; it shall not be bleached with

chemicals (chlorine and the like); it shall not contain more than 2.5 per cent of free acid; its density (at 15° C.) shall be from 0.922 to 0.93; its refraction index at 40° C. shall be from 58 to 59; its iodine index shall be from 101 to 117; it shall give Halphen and Becchi's reaction.

AUSTRIA-HUNGARY.

[From American Ambassador Richard C. Kerens, Vienna.]

Tare on Oil Barrels.

In response to the complaint of an American oil company regarding the tare allowance in Austria-Hungary on barrels filled with lubricating oil from America, the Government has increased the amount of the tare allowance from 13 per cent to 17 per cent.

[From Das Handelsmuseum, Apr. 4, 1912.]

Commercial Treaty with Bulgaria.

At the end of March, 1912, after several weeks of negotiations, a commercial treaty was concluded between Austria-Hungary and Bulgaria. The treaty contains certain special tariff concessions on both sides. [Further details will be given upon the ratification of the treaty.]

CEYLON.

[From Ceylon Government Gazette, Apr. 12, 1912.]

Proposed New Food and Drugs Ordinance.

The attorney general of Ceylon has prepared a draft of a proposed ordinance for the Government supervision of the sale, importation, etc., of food and drugs. This proposed ordinance enumerates the following punishable offenses in connection with foods and drugs: Injurious adulteration of any food or drug; sale of any food or drug not of proper nature, substance, or quality; sale of wrongly compounded food or drug; abstraction of any of the essential elements of any food or drug; importation of adulterated or impoverished foods. These are regarded as the principal evils at which the ordinance aims. A special section makes it an offense to sell condensed skimmed milk without clear indication of its character and unsuitability as a food for infants. The other offenses are of a subsidiary character. [A copy of the proposed ordinance is on file in the Bureau of Manufactures.]

COSTA RICA.

[From the Official Gazette of Costa Rica, Apr. 28, 1912.]

Classification of Automobile Trucks.

The Costa Rican treasury officials have ordered that duty be charged on automobile trucks at the rate of 6 centimos per kilo. [Colon = 100 centimos = 46.5 cents. Kilo = 2.2046 pounds.]

CHINA.

[From Handelsberichten, Netherlands, May 15, 1912.]

Special Surtax in Shanghai.

According to a Belgian consular report, a special surtax on imports and exports at Shanghai, China, was announced to go into effect

May 15, 1912. On goods previously subject to duty under the Chinese tariff the surtax was to be 3 per cent of the amount of the duties specified in the tariff, and on goods not formerly dutiable upon importation or exportation the duty was to be $1\frac{1}{2}$ per cent ad valorem.

DENMARK.

[From Norval Richardson, secretary of the American Legation, Copenhagen.]

Proposed Continuation of Coal Duty.

A bill has been laid before the Danish Parliament proposing the continuation of the duty on coal, which is to expire at the end of 1912. The Danish Government is reported to have obtained a large amount of revenue from this duty during the past two years.

NEWFOUNDLAND.

[From the Board of Trade Journal, Apr. 25, 1912.]

Remission of Duty on Coal.

An act to amend the revenue act, recently passed by the Newfoundland House of Assembly, provides for the free admission of coal for domestic use, imported into the ports of Grand Bank and Fortune, under certain specified conditions. Previously no remission was allowed on coal imported at Grand Bank, while half the duty of 50 cents per ton was remitted on coal imported at Fortune, when used for domestic purposes.

PARAGUAY.

[From *Moniteur Officiel du Commerce*, France, May 9, 1912.]

Reopening of Customhouses.

It is announced that the customhouses of Villa Franca Vieja and Concepcion, which were provisionally closed, have been reopened, and the customhouse of Villa de Pilar has also been reopened. The customs administration is accordingly operative throughout the extent of the territory of Paraguay. [See *Daily Consular and Trade Reports*, Apr. 23, 1912.]

PORTUGAL.

[Document transmitted by Vice Consul General James L. A. Burrell, Lisbon.]

Port Charges at Lisbon.

There is on file in the Bureau of Manufactures a copy of the tariff of wharfage taxes which the Portuguese Government put in force in the port of Lisbon December 9, 1911.

ST. PIERRE AND MIQUELON.

[From *Journal Officiel*, France, Apr. 19, 1912.]

Importation of Nursing Bottles.

The importation into St. Pierre and Miquelon of nursing bottles with tubes attached is prohibited by the extension to these islands of the provisions of the French law of April 6, 1910, prohibiting the sale, exposure for sale, and the importation of nursing bottles with tubes.

TRIPOLI.**Tariff Changes.**

Consul John Q. Wood has reported a number of tariff changes in Tripoli, promulgated by the Italian Governor General. Specific rates of duty are imposed on beer, spirits, and alcoholic liquors, and the following articles are put on the free list: Crude stone and earth, lime, rough slate, firewood and charcoal, straw for feed and bedding.

Customs Regulations.

Consul Wood has also reported certain changes in the customs regulations, partly in connection with the changes above mentioned. The Governor General has put in force new regulations regarding the sale and importation of spirits and has prohibited the importation of saccharine or saccharine products. Copies of the decrees in question are on file in the Bureau of Manufactures.

NEW TELEPHONE SYSTEM FOR MEXICAN CITY.

[From Consul Samuel E. Magill, Guadalajara.]

The Mexican Telephone & Telegraph Co., an American-owned concern with headquarters in Mexico City, has been granted a concession by the city of Guadalajara to put in an entirely new telephone system and give this city a service modern and up to date at a cost of about \$250,000 gold, with wires underground throughout this city.

While there are two telephone companies now serving this city, the service of each is insufficient and the operators inefficient, so that the business interests of the second city of Mexico will welcome a good service.

The representative of the company claims work will commence at once and that the system will be in operation in about 1½ years, also that, as American capital controls the company, American methods, apparatus, and material will be used wherever possible. He further claims that the company also plans to connect Vera Cruz on the east coast with Manzanillo on the west, thus giving long-distance telephone service between the connecting cities, which include some of the most important in the Republic—Orizaba, Puebla, Mexico City, Queretaro, Celaya, Guanajuato, and Guadalajara.

PORTO RICAN COFFEE.

The Porto Rican coffee trade proposes to establish a roasting plant in New York and endeavor to popularize the island's coffee in the United States. American imports of coffee reach nearly 1,000,000,000 pounds a year, yet imports of Porto Rican coffee last year were only 250,000 pounds. Porto Rico produces 30,000,000 to 45,000,000 pounds of coffee yearly, which are practically all sold in Europe, where it is said to bring excellent prices. However, the American market would prove more advantageous for the Porto Rican coffee grower if a demand for it can be created here. There is a Porto Rican industrial exhibit in New York which includes the island's coffee, and detailed information can be secured on any subject relating thereto by addressing the Porto Rican Bureau of Information, 501 Fifth Avenue, New York, N. Y.

BRITISH ENGINEERING-STANDARDS COMMITTEE.

[From Consul General John L. Griffiths, London.]

In view of the fact that inquiries are received from time to time at the London consulate general respecting various engineering standards of Great Britain the following details regarding the engineering-standards committee have been collected.

The committee was originally appointed in January, 1901, by the council of the Institution of Civil Engineers, to consider the advisability of standardizing various kinds of iron and steel sections. It was then composed of seven members, and the first meeting was held in February, 1901, when it was decided to approach the councils of the Institutions of Mechanical Engineers, Naval Architects, and of the Iron and Steel Institute in order to secure, if possible, their cooperation. These invitations were accepted, and the reorganized committee began work in April, 1901.

Expansion of Work.

In November of the same year it was suggested that the standardization of electrical plant should be undertaken, with the result that the Institution of Electrical Engineers was also invited to nominate members of the committee, and in June, 1902, the committee was accordingly enlarged.

The work as originally undertaken has thus from time to time been expanded, and numerous subjects have been considered. Some idea of their diversity may be suggested by an enumeration of the several sectional committees. They are: Main; finance; publication and calculations; sections and tests for materials used in the construction of ships and their machinery; steel castings and forgings for marine work; iron for shipbuilding and ships' cables; bridges and building construction; railway rolling-stock underframes and locomotives, with subcommittees on component parts and types, tires, axles, and springs, steel plates, copper and its alloys, iron for railway rolling stock, railway rails, tramway rails, tire profiles, screw threads and limit gauges, automobile threads, and also on small screws and screw heads, rolled and drawn sections, keys and keyways, pipe flanges, cement, vitrified-ware pipe, cast-iron pipes for hydraulic power, water, gas, and sewage, heating, ventilating, and house drainage, and for electrical purposes; electrical plant with subcommittees on generators, motors, and transformers, prime movers, physical standards, telegraphs and telephones, cables, electric tramways, and electrical plant accessories.

The main committee, with the sectional and subcommittees, now has a total membership of 321.

Government Subsidies—Adoption of Recommendations.

The funds necessary for carrying on the work were originally provided by the several supporting institutions; but inasmuch as it was deemed important to secure Government recognition a deputation waited upon the Prime Minister, with the result that the sum of \$14,599 was included in the estimates for the fiscal year 1903-4 as a contribution to the committee. The Government continued to subsidize the committee from 1904 to 1906 by grants equal to the amounts contributed by the several supporting institutions,

manufacturers, and others, and also from 1906 to 1909, but on a smaller scale. Since 1909 annual grants have been made by the Government.

In recognition of the work done by the committee—occasioned largely, no doubt, by the publication of the first report on the standardization of Indian locomotives—the Indian Government made a grant of \$4,866 in 1904; since then a permanent locomotive committee has been formed to consider questions submitted by the railway board in India, the expenses of which are defrayed by the Indian Government.

It is stated that the committee's recommendations of sizes and tests of materials continue to be more and more generally recognized and adopted. For instance, the British standard specifications for steel and marine boilers and for structural steel for shipbuilding have been adopted by the Admiralty, and also the standards for steel castings and forgings for marine purposes, subject to certain conditions required by the special character of naval work. The standard for Portland cement is being increasingly adopted, as also are the recommended specifications for railway material, tramway rails, railway rolling stock, steel frame buildings, steel for bridges and general building construction, and locomotives for India.

Some of the Questions That Have Been Considered.

Among some of the questions which the various sectional and subcommittees had under consideration during 1911 were the specifications for laminated bearings and buffing springs and for spring steel, in which some modification seemed advisable in order to avoid stressing the plates too highly; and, as the result of experiments, a formula for the deflection was approved in which the tensile strength on the plates of the finished spring was limited to about 70 tons per square inch. A revision of the report on the standard specification for structural steel for bridges and general building construction was also undertaken. In view, it is said, of the increasing use of British standards abroad, a table is to be added to the report on the testing of steel, giving the equivalents of British tons in pounds, so as to obviate confusion with the American ton of 2,000 pounds.

With regard to standard threads, nuts, and boltheads for use in automobile construction, the British fine-threads standard was adopted with two exceptions and the Whitworth dimensions across the flats with one exception for all hexagonal nuts and boltheads. Two of the smallest sizes in the former standard were altered, the modification consisting of 25 threads per inch instead of 26 and the substitution of a size having a full diameter of 0.281 inch for that having a full diameter of 0.270 inch.

Experiments were carried out, on behalf of the committee, by the National Physical Laboratory with a view to obtaining data respecting the breaking stress of hard-drawn wire of small diameter, such as telephone and telegraph wire. One important point was the investigation into the variation of strength due to the kinking of the wire. A comparison between the modulus of elasticity on 50-foot lengths compared with short straight lengths emphasized its importance, and it was recommended that this class of wire should be wound in coils of large diameter in order to minimize the weakening effect, which must be taken into consideration in erecting long lengths.

Revision of Specifications—Publications—Electrical Standardization Conference.

It may be added that the various original standard specifications are carefully revised from time to time in order to keep abreast with new inventions and improvements. It is pointed out, on behalf of the committee, that perhaps its most salient feature is the advantage which accrues to Great Britain in that it possesses a central organization from which information may readily be obtained, both as to standards and as to the causes that led to their adoption.

Some 57 reports on various subjects have been published and may be secured from the secretary [whose address is obtainable from the Bureau of Manufactures] at prices ranging from 60 cents to \$5.10 each. A minimum subscription of \$51.10 entitles the donor to receive a copy of each report as published and of each revised report and to be supplied with periodical information two or three times a year concerning the various subjects dealt with by the committee and early information of any revisions in hand.

Steps have been taken for holding at an early date—probably in London—a conference on international electrical standardization.

HARMFUL EFFECTS OF SHORT-PAID LETTERS.

[From Consul General Richard Guenther, Cape Town, South Africa.]

It seems necessary to repeat and emphasize the injury American merchants and manufacturers are constantly inflicting upon themselves by carelessness in the matter of definitely instructing their mailing clerks to affix the correct postage on letters (5 cents per half ounce) and printed matter, unsealed (1 cent per each 2 ounces) at the time of mailing to Africa.

The extract below is from a letter received from one of the largest department houses in South Africa. This letter simply states on paper a complaint repeatedly brought to my attention by merchants here, who have been subjected to this annoyance until it has ceased to be a blunder satisfactorily explained as a "mistake" or "oversight" or "we are always very careful," etc.

While writing, we think it wise to point out to you an oversight which frequently happens. From the attached you will notice three letters were received in one mail insufficiently stamped. Even less attention is given to circular and catalogue matter.

It not infrequently occurs that the addressee refuses to pay the fine and take delivery of short-paid letters, as a protest against the carelessness of Americans, especially in this matter.

I am aware that American consuls from all parts of the world are constantly bringing this matter to the attention of the merchants who are damaging not only their own but the interests of American foreign trade generally by carelessness in this regard. Still, I respectfully suggest that the widest publicity practicable be given to the self-inflicted injury these gentlemen are unnecessarily sustaining.

French lingerie was exported to the value of \$2,600,000 in the first quarter of this year, an advance of about 30 per cent over last year and of 100 per cent over 1910. This does not include ready-made clothing for women, which aggregated over \$6,000,000 during January–March, 1912, likewise a heavy trade increase. In addition the quarter's exports included \$4,000,000 worth of trimmed hats.

INCREASED AMERICAN IMPORTS INTO LIVERPOOL.

[By Consul Horace Lee Washington, supplementing the commercial review printed in Daily Consular and Trade Reports for Apr. 10, 1912.]

The imports of American merchandise into the English port of Liverpool were greater last year than ever before in the history of the trade. The nondutiable goods arriving from the United States were valued at \$328,811,726, a gain of \$71,772 over 1910 and \$17,189,953 over 1909. The dutiable goods amounted to \$13,246,006 compared with \$12,658,699 for 1910 and \$13,533,311 for 1909. The principal nondutiable imports last year were cotton, bacon, hams, copper, lard, maize, animals, leather, skins and furs, apples, and canned salmon, in the order given. Tobacco, fruit (dried and in sirup), and molasses were the principal dutiable items of import.

The following table gives the quantities (hundredweight equals 112 pounds) and values of the principal articles imported from the United States for 1910 and 1911:

Articles.	1910		1911	
	Quantities.	Values.	Quantities.	Values.
Animals:				
Oxen and bulls..... number	00, 400	\$5, 165, 796	66, 969	\$6, 108, 562
Sheep and lambs..... do			39, 052	222, 972
Apparel.....		202, 040		260, 064
Boots and shoes:				
Leather..... dozen pairs	59, 355	1, 471, 975	52, 527	1, 329, 108
Rubber..... do	66, 910	449, 577	38, 197	263, 637
Breadstuffs:				
Corn meal, etc..... hundredweight	60, 880	104, 264	81, 560	136, 251
Corn..... do	2, 270, 000	3, 289, 369	5, 121, 100	6, 636, 046
Barley..... do	107, 700	170, 103	23, 900	41, 573
Wheat..... do	1, 814, 800	3, 844, 232	2, 515, 700	4, 911, 217
Wheat meal and flour..... do	520, 550	1, 395, 410	624, 991	1, 604, 513
Caoutchouc:				
Raw..... do	30, 826	3, 703, 410	24, 270	509, 619
Manufactures of, n. e. s.....		358, 991		519, 693
Confectionery.....		90, 011		95, 219
Cotton, raw..... hundredweight	11, 161, 044	202, 077, 625	13, 727, 962	193, 269, 325
Cottonseed cake..... tons	18, 068	643, 083	17, 053	581, 122
Copper, unwrought..... do	23, 180	6, 640, 109	27, 551	7, 711, 328
Cutlery.....		149, 065		177, 684
Dairy products:				
Butter..... hundredweight	23	525	5, 955	149, 079
Cheese..... do	(?)	(?)	73, 814	990, 064
Fruit:				
Apples..... do	700, 954	2, 241, 933	908, 835	2, 170, 322
Canned in sirup..... do	163, 307	1, 150, 453	156, 609	1, 283, 926
Plums, dried..... do	32, 317	289, 775	23, 889	262, 795
Furs, undressed..... number	3, 975, 991	4, 355, 789	4, 087, 705	3, 407, 940
Hardware.....		132, 085		87, 202
Hosiery, cotton.....		487, 662		763, 319
Lard..... hundredweight	480, 697	7, 304, 771	593, 214	6, 649, 477
Lead, pig and sheet..... tons	11, 650	729, 965	13, 679	902, 511
Linseed cake..... do	14, 718	585, 172	12, 106	459, 504
Leather:				
Dressed..... hundredweight	112, 965	6, 670, 326	96, 538	5, 695, 556
Undressed..... do	226, 816	4, 680, 990	250, 459	4, 818, 832
Machinery:				
Electrical.....		418, 723		567, 877
Agricultural.....		329, 257		396, 082
Textile.....		158, 078		272, 372
Meat:				
Bacon..... hundredweight	1, 011, 006	16, 600, 964	1, 327, 690	17, 763, 182
Beef—				
Chilled..... do	99, 096	1, 018, 721	24, 744	240, 740
Salted..... do	47, 287	433, 517	50, 299	416, 522
Hams..... do	422, 672	7, 418, 224	562, 931	8, 675, 577
Other—				
Canned, etc..... do	26, 910	610, 273	31, 553	779, 121
Frozen..... do	92, 461	810, 899	75, 875	682, 983
Salted..... do	41, 105	528, 856	47, 971	501, 190
Molasses.....		393, 271	428, 697	448, 935
Musical instruments and parts.....		254, 019		822, 987

Articles.	1910		1911	
	Quantities.	Values.	Quantities.	Values.
Oils:				
Cottonseed—				
Refined..... tons.	6,936	\$1,221,364	8,784	\$1,408,433
Unrefined..... do.	17	3,049	2,899	387,353
Gas..... gallons.	7,008,889	262,785	5,126,066	184,649
Illuminating..... do.	5,542,613	406,471	6,285,368	402,804
Lubricating..... do.	10,645,859	1,808,322	11,623,781	1,739,685
Turpentine..... hundredweight.	65,097	731,065	49,495	503,974
Oleomargarine..... do.	28,992	355,068	45,301	505,083
Painter's colors and pigments..... do.	58,957	648,499	67,229	614,296
Paper, printing, writing, wrapping, etc.....		325,234		323,667
Paraffin wax..... hundredweight.	257,876	1,457,916	250,161	963,830
Rags, woolen, not pulled..... tons.	11,619	1,059,032	11,580	1,063,249
Rosin..... hundredweight.	286,060	874,037	391,619	1,546,061
Salmon, canned..... do.	256,497	3,253,148	129,793	1,815,593
Steel blooms, billets, and slabs..... tons.	17,567	381,177	77,575	1,670,211
Tallow and stearin..... hundredweight.	17,404	150,496	106,053	810,923
Tobacco:				
Stemmed..... pounds.	21,437,233	3,356,332	23,270,265	4,121,502
Unstemmed..... do.	48,617,651	5,923,264	45,474,487	6,161,232
Manufactured.....		223,575		205,232
Wood, and manufactures of:				
Fir, hewn or sawn..... loads.	61,803	1,058,986	74,578	1,272,524
Furniture wood..... tons.	37,773	1,051,357	34,803	965,766
Oak, hewn..... loads.	47,327	1,306,874	50,946	1,359,933
Staves..... do.	16,467	632,114	17,223	543,661
Other woods.....		822,017		675,270
Manufactures.....		1,068,829		1,037,098
Wool, sheep's..... pounds.	2,437,809	516,467	1,629,426	324,097
Wool waste..... do.	344,463	63,146	294,820	52,096
Zinc, in cakes..... tons.	4,823	449,617	6,880	749,313

SOME AMERICAN PURCHASES THIS YEAR.

[Summary of declared exports to the United States through American consulates at certain places for the first three months of 1912.]

Belgrade, Servia.—Plum jelly, \$4,425; copper ore, \$116,505; goatskins, \$7,762.

Grenoble, France.—Shelled walnuts, \$292,954; kid gloves, \$429,643; photographic paper, \$37,628; all other articles, \$7,873.

Cologne, Germany.—Aniline salts and dyes, \$587,953; chemicals, \$63,061; paints and colors, \$69,429; pharmaceutical products, \$58,067; wine, \$61,082; mineral water, \$64,476; iron, \$33,513; all other articles, \$238,055.

Cardenas, Cuba.—516,144 bags of centrifugal sugar, \$5,331,256; 670,000 gallons "2d" molasses, \$21,755; 849 gallons honey, \$509.

Matanzas, Cuba.—Centrifugal sugar, \$10,038,476; molasses, \$61,600; all other articles, \$2,787.

Tampico, Mexico.—Crude oil, \$668,058; itxle, \$63,163, out of a total of \$827,700; an increase of \$732,204 over the same quarter in 1911.

Matamoros, Mexico.—Live cattle, \$28,254; cotton seed, \$16,070; all other articles, \$23,669.

Monterey, Mexico.—Argentiferous lead, \$1,806,655; bars fine silver, \$950,053; hides and skins, \$122,902; all other articles, \$120,427.

San Salvador, Salvador.—Coffee, \$670,224; all other articles, \$12,404.

Panama, Panama.—Ivory nuts, \$15,872; cocobolo, \$14,590; rubber, \$11,703; hides, \$26,197; all other articles, \$8,718.

Para, Brazil.—Rubber, \$6,512,165; cocoa, \$11,589; nuts, \$44,947; deerskins, \$12,899; all other articles, \$6,581,600.

Manaos, Brazil.—3,082,456 kilos rubber, \$6,200,435; 41,169 hectoliters Brazil nuts, \$269,624.

Maranhao, Brazil.—7,022 kilos deerskins, \$4,248.

Tamatave, Madagascar.—Mangrove bark, \$37,136; raffia, \$1,048; straw hats, \$2,217.

Sydney, Australia.—Copper, \$719,732; wool, \$358,081; calfskins, \$48,997; marsupial skins, \$173,518; rabbit skins, \$36,837; hides, \$98,041; shेरlings, \$19,606; tin, \$131,590; lumber, \$19,996; all other articles, \$40,557. To Philippines.—Flour, \$91,998; frozen meat, \$52,537; butter, \$21,835; canned meat, \$6,750; oats, \$4,770; frozen produce, \$4,561; all other articles, \$15,686. To Hawaii.—Frozen meat, \$17,303; sulphate ammonia, \$11,173; onions, \$6,812; all other articles, \$9,534.

CHINESE WOOD OIL.

[From Consul General Roger S. Greene, Hankow.]

Szechwan wood oil is preferred in Hankow, as it is lighter in color than that produced elsewhere. About 30 per cent of the output is said to be manufactured in Szechwan, 50 per cent in Hunan and Kweichow Provinces, and 20 per cent in Hupei Province, mostly in the region about Ichang.

There are no statistics of production, but the customs returns give the following figures for shipments to foreign and Chinese ports for the past two years from Hankow, which is the principal shipping point: To foreign countries—1910, 15,889,600 pounds; 1911, 12,285,733 pounds. To Chinese ports—1910, 84,804,666 pounds; 1911, 65,682,266 pounds.

The Upward Trend of Prices.

Prices during the last two years have varied between approximately 8 and 14 taels per picul (133½ pounds), which at the present Treasury rate for the Hankow tael would be equivalent to \$3.90 and \$6.83 for 100 pounds avoirdupois. Silver exchange has, however, fluctuated greatly during this period. The following prices were given me by a local firm, the "cents per pound" being deduced from the shilling-and-pence quotations:

Month.	Per picul of 133.3 pounds.	Per hundred weight of 112 pounds.	Per pound.
1910.			
January.....	<i>Taels.</i> 8. 70	<i>s. d.</i> 28 3	<i>Cents.</i> 6. 136
April.....	9. 10	29 3	6. 354
July.....	9. 70	29 9	6. 461
September.....	10. 20	31 6	6. 842
1911.			
January.....	10. 65	32 3	7
April.....	11. 60	34 0	7. 387
July.....	12. 50	35 6	7. 711
September.....	13. 40	36 9	7. 941
1912.			
January.....	12. 20	30 0-41 0	8. 455-8. 07
April.....	10. 70	35 3	7. 657

The last two columns of the above table represent prices c. i. f. New York.

Primitive Extraction Methods.

The oil is produced in small quantities by individuals, collected by Chinese middlemen, and sold to foreign merchants at Hankow who clarify the oil (by allowing it to settle) and pack it for shipment. The oil consigned to the United States is shipped in oak barrels. The bulk of it goes via Suez to New York.

Primitive native methods are used for extracting the oil, and under present conditions it is not felt that a modern crushing plant could be successfully established for producing wood oil, though a suitable decorticating machine would be welcomed.

American Experiments—Imports.

In experiments conducted by the United States Department of Agriculture in the Gulf States and California the China wood-oil tree has shown itself capable of fruiting and has produced a fair crop of

fruit. The department states that it feels very much encouraged over the results of its experiments. Should the tree prove commercially successful, its culture would be limited to the Southern States.

Official records show that imports of nut oil into the United States from China during the last five fiscal years had a value of \$800,550 in 1907, \$678,299 in 1908, \$794,257 in 1909, \$822,371 in 1910, and \$2,176,309 in 1911. These totals include wood oil, which is not separately stated in available data.

Among earlier references to China wood oil appearing in Daily Consular and Trade Reports were the articles published July 22 and August 25, 1908, and June 26, 1911.

THE QUESTION OF PRICE LISTS AND AGENCIES.

[From Consul Lester Maynard, Harbin, China.]

Recently a number of opportunities have occurred for the sale of American manufactures in Harbin, and catalogues from the consulate files have been referred to; but in each case price lists had not been included, and as the demands were urgent but did not justify cabling for prices, due to the high cable charges, no business resulted. Unless the intending importer has some means of having an English catalogue translated, or unless he is aware of the fact that American consuls are always prepared to assist him in this regard, a catalogue in English is of little value; but in addition to this, when the prices are omitted the consul is equally helpless and the catalogue is useless.

One difficulty encountered at Harbin in the consulate's efforts to assist American manufacturers is the fact that this office is not advised by the manufacturers regarding their agencies for China; and in a number of instances American manufacturers have declined to either place agencies or sell direct to Harbin dealers, on the ground that they have "given the agency for the Russian Empire" to a Moscow merchant, and seem to be under the impression that, because nearly all the Harbin merchants are Russians, this would exclude them from purchasing direct. Whether or not these manufacturers have given exclusive agencies for China does not appear.

At the present time considerable business could be done in Harbin with American typewriters, but the local dealers, being unable to purchase direct, are forced to buy from a Moscow agent who has paid the Russian customs duty and extra and unnecessary freight charges with the result that the price of typewriters here is almost prohibitive. Similar conditions apply in a number of other lines.

THIN PAPER FOR VENEZUELA.

[From Consul Thomas W. Voetter, La Guaiara.]

A member of a Venezuelan firm which handles much American paper has stated that a large proportion of paper for business uses, typewriter work, etc., comes from the United States. He stated, however, that for social uses and for ordinary letter writing he had to order paper from Italy, as American makers did not seem to make the light weights desired, nor with the rulings to which the people were accustomed. It is the custom to use the Continental square envelope. As postage rates here are high the reason for the preference for light papers is apparent.

ARGENTINE BUSINESS NOTES.

[From Vice Consul General Albert G. Elert, Buenos Aires.]

Art Scholarships—Natural History Event.

The Government of Argentina has set aside \$12,738 for one-year scholarships in Europe for painting, sculpture, music, and art. These scholarships are to be awarded by the National Commission on Fine Arts to 10 students passing a competitive examination.

The first hippopotamus said to be born in South America first saw daylight in the Zoological Gardens in Buenos Aires on April 30. [The rearing of young "hippos" in captivity is assuming some importance, especially in Europe, while Central Park, in New York, has been selling an average of about one young animal yearly for a decade. A young hippopotamus is worth about \$2,500.—B. of M.]

Coal Deposits—Railway Concession Lapsed.

In 1903 the Minister of Agriculture sent an expert into Neuquen Territory to report on coal deposits. The report confirmed the existence of two coal fields in Chos-Malal district, one northward, the other southward. No action has yet been taken by the Government for their development.

The cable companies operating in Argentina have reduced their rates 20 cents from May 1.

The Government has declared as lapsed the concessions granted to F. Mulhall for a railway line from San Blas to Choele-Choel, with a branch to Carmen de Patagones; also for a port at San Blas.

Importation of Eggs—Wine Industry—Rival to Sugar Cane.

During 1911 Argentine imports of eggs amounted to 1,090,891 kilos (kilo=2.2 pounds), valued at \$210,445, as compared with 1,274,280 kilos, valued at \$245,934 in 1910. The duty collected on these importations was \$25,264.

The wine industry of Argentina during 1911, as supplied by the 3,725 wine establishments on the register, showed that 3,160 worked during the year, dealing with 583,781 tons of grapes and producing 390,093,381 liters (liter=1.05 quarts) of wine, a yield equivalent to 66.8 per cent.

Experiments are being conducted in Tucuman with a process of making sugar from cornstalks. It is also announced that a corn-sugar factory will shortly be established in the Province of Buenos Aires.

Insurance Declarations.

In reference to the petition of insurance companies asking for the annulment of the resolution of the Inland Tax Administration of October 26, rejecting their request that they may be exempted from presenting sworn declarations of the reinsurance which they effect with foreign insurance offices, the Minister of Finance has confirmed the resolution, because the insurance with foreign offices is subject to a tax of 7 per cent in the premiums, except that for life insurance, which pays 2 per cent, and for agricultural insurance, which is free from taxation, while the national offices pay nothing for the premiums on the last-mentioned insurances, and only one-half of 1 per cent on life insurance and 1.4 per cent on the premiums for other kinds of insurance. It is deemed necessary that the administration be sup-

plied with sure proofs of the foreign insurances effected, whether direct or by reinsurance.

Falsified Yerba Maté—Tobacco Profits—Sales of Rural Property.

The National Council of Hygiene has been making an investigation and has reported that the greater part of the yerba maté ("Paraguayan tea") elaborated in Argentina and sold in the stores is composed of ingredients, the principal one of which is "congonilla." The Commercial Defense League has taken the matter up and the Minister of Agriculture has been invited to make an inquiry into the allegations.

The Compañía General de Tabacos made a profit in 1911 of \$130,948 on a paid-up capital of \$424,600.

The total sales of rural property throughout the Republic during 1911 is estimated at 33,858,079 acres, realizing \$152,441,843.

Strikes and Accidents to Workmen.

According to official statistics, there were 887 strikes in Argentina from January 1, 1907, to December 31, 1911. The total strikers numbered 232,138, with an average of 248 workmen to each strike. During 1911 there were 102 strikes, 7 (6.9 per cent) resulting favorably to strikers, 3 (2.9 per cent) partly favorable, and 89 strikes (87.2 per cent) negatively.

The following figures relating to accidents to workmen are taken from a recent official publication:

Year.	Fatal.	Serious.	Slight.	Total.
1907.....	37	132	651	820
1908.....	90	279	1,263	1,632
1909.....	77	338	1,427	1,817
1910.....	114	343	1,721	2,178
1911.....	103	174	2,067	2,361

The total number of accidents during the five years was 8,808, of which 421, or 4.8 per cent, were fatal.

Instruction Books for Immigrants.

The Dirección General de Inmigración has ordered the printing of passbooks which will be furnished newly arrived immigrants. The books are headed "This passbook is to be returned to the Dirección General de Inmigración when its owner, the immigrant of to-day, may be the employer or landowner of to-morrow." The book contains a personal description of the immigrant, ink thumb impression, and other data, whereby the owner may be identified. It also contains the name of the country from which the immigrant came, the port of embarkation, and the date of his arrival in Argentina. Then follows a commendation addressed to the national, provincial, and territorial officials and individuals asking that the newly arrived immigrant be kindly received and treated, etc.; a portion of the national constitution relative to the form of government in the Republic; extracts from the immigration laws defining the rights and duties of immigrants; the forms of labor contracts that may be used; the names of the national and foreign banks; the names of steamship agencies; a table for the conversion of foreign money into the currency of Argentina; a note from the Minister of Agriculture referring to the measures taken for the protection of immigrants and others; the installation of exhibits of agricultural machinery in the immigrants'

hotel in order that they may learn its operation in the first few days after their arrival are also contained in the passbook.

[From Consul General R. M. Bartleman, Buenos Aires.]

Aerial Fleet for Argentine Navy.

A Buenos Aires paper makes the following announcement:

The Sociedad Sportiva Argentina has made an offer to the Minister of War, General Gregorio Velez, of an aerial fleet, to be subscribed for by the public, for which purpose 1,500,000 illustrated postcards will be issued. In connection with this issue there will be a competition of drawings allegorical of aviation in its application to the art of war. [The competition closed on May 10.] The commission appointed to organize the raising of the funds for providing an aerial fleet is as follows:

Honorary presidents: The Minister of War, Gen. Gregorio Velez; the Minister of Marine, Rear Admiral Juan P. Valiente. President: Baron Antonio de Marchi, president of the Sociedad Sportiva Argentina. Vice president: Señor George Newbery, president of the Argentine Aero Club. Honorable secretary: Maj. Arturo P. Sinsoni. Members: Gen. Ramon Ruiz, Chief of the Staff; Rear Admiral Manuel Domecq Garcia, President of the Centro Naval; Col. Martin Rodriguez, Secretary of the Ministry of War; Col. R. Sarmiento, inspector of engineers; Señor Eduardo Hunter, vice president of the Sociedad Sportiva Argentina; and the directors of all the press organs in the city.

RICE TRADE OF OMAN.

[From Consul Homer Brett, Maskat.]

Rice is by far the largest item of import into Maskat, and the trade, though not so great as it formerly was, is still large. Maskat was once the distributing center for a considerable territory, but of late this position has been taken by Debai, the reason being that at that point no duty is imposed and the 5 per cent collected here is sufficient to prevent the local merchants from competing.

Exact figures of the amount of rice imported annually are unobtainable, but it is certainly not less than 100,000 bags of 168 pounds each, or 8,400 short tons. All of this comes from Calcutta and, at present, consists entirely of Bengal rice of two qualities, the Ballam and the Rari. The former costs in Calcutta \$2.80 per bag of 168 pounds; freight to this port is 32 cents, and duty and landing charges 24 cents, making the total Maskat cost per bag \$3.36, the Rari grade being about 16 cents cheaper. Credits of 3 to 9 months are given and no security is required, the purchaser's standing and reputation being the only guaranty of payment. The trade is largely in the hands of Banians or Indian merchants.

The present (April) prices made to retailers are \$4.01 cash or \$4.12 credit per bag. When Rangoon rice was \$1.95 per bag it was largely imported for the use of the poorer population, but the price having risen it is not now brought in, as the Bengal grain is preferred unless the difference in cost is considerable.

MONTEVIDEO TO PANAMA.

[From Consul Frederic W. Goding, Montevideo, Uruguay.]

The Pacific Steam Navigation Co. steamers now sail from Liverpool, via Montevideo and other ports, to Panama, calling at the same ports on the return voyage. Travelers from the United States coming down the east coast may now take the west-coast journey by taking first-class steamers here, without the transfer at Callao as was formerly the case.

RUSSIAN STATE FORESTS.

[From Consul John H. Grout, Odessa, Russia.]

While the privately owned woodland of Russia is being annually reduced in area, the extensive State forests, generally less accessible and farther away from well-developed trade routes, are but gradually being brought into use, and for a long time to come they will continue a welcome and important reserve timber supply for the world. In round numbers these forests cover 937,000,000 acres, a fair proportion of which is well stocked.

The increasing utilization of the State forests is shown by the growth of gross receipts therefrom. In 1885, the gross receipts amounted to \$7,176,010; in 1890, \$9,486,300; 1895, \$14,915,945; 1900, \$28,838,455; 1904, \$31,132,780; 1909, \$34,343,290; 1910, \$38,610,580; 1911, \$42,525,610; yet even this last total is only about 24 kopecks per dessiatine (12 cents per 2.7 acres).

Much of the timber apportioned for cutting can not be placed. This remains standing and harms the new growth. Measures are now contemplated for bringing this timber into the world's markets. Roads will be made, and over 1,000 new officials will be added to the staff of foresters, and many more keepers. Much is also intended to be done for the improvement of the condition of the forests.

SWISS FACTORY STATISTICS.

[From Commercial Agent Archibald J. Wolfe.]

The following statistics show the preliminary results of the Swiss Federal census of 1911 regarding Swiss factory enterprises:

Trades.	Factories.	Employees.		
		Male.	Female.	Total.
Cotton trades.....	326	11,617	17,932	29,549
Silk industry.....	215	7,735	23,802	31,537
Woolen industry.....	67	2,190	3,135	5,325
Linen industry.....	24	440	567	1,007
Embroidery.....	866	11,787	16,822	28,609
Other textile trades.....	112	1,517	2,633	4,150
Clothing and outfitting.....	660	8,789	16,061	24,850
Provisions and alimentary trades.....	684	13,440	12,604	26,044
Chemical industry.....	198	6,967	1,725	8,692
Centrals for power, gas, and water.....	263	4,254	1	4,255
Paper and graphic trades.....	625	13,227	4,930	18,157
Woodworking trades.....	1,268	23,333	432	23,765
Metal working.....	623	21,865	1,460	23,325
Machinery, apparatus, etc.....	640	45,313	1,122	46,435
Jewelry and watchmaking.....	856	21,445	13,538	34,983
Clay and stone trades.....	441	17,160	1,000	18,160

New Argentine Publications.

Consul General R. M. Bartleman has sent from Buenos Aires copies of (1) the English Standard Dictionary of Argentina for 1912, (2) the Annual Report of the Buenos Aires Commercial Exchange, and (3) the Manual de la Bolsa de Comercio de Buenos Aires, all of which are placed in the public reference library of the Bureau of Manufactures in Washington. Copies of the publication last named may be purchased from G. E. Stechert, 151-155 West One hundred and twenty-fifth Street, New York, at \$3.40 each.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9036. Removal of rock.**—The American minister at Bucharest, Roumania, reports that the question of the removal of about 36,000 cubic meters of conglomerate rock at the bend of the Danube River near Toultscha (Tulcea) is being considered by the "Commission Europeenne du Danube" and that it is thought probable that the work will be carried on by the administration (regie) itself. If any Americans care to secure further particulars regarding this enterprise it would be advisable for them to communicate directly with the commission at Galatz, Roumania, at once.
- No. 9037. Steel pipes, valves, and hydrants.**—The American consulate general at Vancouver, British Columbia, Canada, reports that tenders will be received until June 24, 1912, by the Clerk, Municipal Council, Kerrisdale, for supplying about 8 miles of steel pipes, varying in diameter from 4 to 18 inches; also for valves and hydrants. Particulars may be obtained at the office of the engineers, Cleveland & Cameron, 506 Winch Building, Vancouver, from whom copies of the specifications, schedules, etc., can be obtained also. Tenders will not be considered unless made out on the forms supplied.
- No. 9038. Wharf construction.**—The American consul general at Ottawa, Canada, reports that the Department of Public Works, Ottawa, has advertised for tenders, to be received until July 4, 1912, for the construction of a wharf at Brundages Point, Westfield, Kings County, New Brunswick, and for constructing a pile bent wharf at Needles, division of Arrow Lake, District of Kootenay, British Columbia. Plans, specifications, and forms of contract can be seen and forms of tender obtained at the Department of Public Works at Ottawa.
- No. 9039. Paper for tobacco monopoly.**—A report from the American minister at Bucharest, Roumania, states that bids will be opened for supplying paper in sheets and rolls for the use of the Roumanian tobacco monopoly for three years, beginning January 1, 1913. Information in regard to quantity and conditions can be obtained upon direct application to the "Direction Generale" of the Government monopolies, Calea Victoriei 127, Bucharest, Roumania, and American manufacturers who contemplate submitting bids should communicate with that office.
- No. 9040. Public works by European municipality.**—An American consul in a European country has forwarded a list of public works to be undertaken by a municipality in his district, with the amounts to be expended in each case. The undertakings include improvements to school buildings and the erection of new ones, sewerage extension, construction of water mains, railway bridges, extension of railway tracks, improvement of markets, etc. The detailed list can be obtained from the Bureau of Manufactures.
- No. 9041. Heating apparatus, clocks, and church equipment.**—A parish in France is breaking ground for the construction of a new cathedral church building. The new edifice is to be of stone, and will cost about \$400,000. American manufacturers and exporters of heating apparatus, tower clocks, and other equipment for church buildings and cathedrals should address catalogues and descriptive matter to the architect, whose name is furnished by the American consul who forwarded the report.
- No. 9042. Dry dock and shipbuilding plant.**—An American consul has forwarded a copy of a concession granted by the local government to a business firm for constructing a dry dock and shipbuilding plant, the latter to consist of machine shop, electric cranes, marine railways, shipways, ships and channels, and wood-working shops, boiler shops, pattern houses, paint shops, storehouses, timber sheds, power house with its electrical equipment, and all other necessary equipment to a first-class shipbuilding plant capable of building ships of 20,000 tons register capacity. The company must expend in this work not less than \$6,000,000. Copy of the complete report, containing detailed information, will be sent to interested firms upon request.
- No. 9043. Field trials for furrow-making plows.**—The American consul general at Cape Town, South Africa, has forwarded a copy of a letter from a society announcing field trials in plows for furrow making, which will probably take place about March 1, 1913. Prizes are offered for the best implements. Copies of the announcement, etc., will be sent by the Bureau of Manufactures to American firms interested.

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MEDICAL AND SURGICAL ARTICLES IN CHINA.

[From Consul General George E. Anderson, Hongkong.]

There have been great fluctuations in the trade in medical and surgical apparatus and instruments in China since such modern goods were introduced. The United States has had a considerable share, shipping direct at one time about 25 per cent of the total imports, not including the portion of imports received from American manufacturers through Great Britain, Hongkong, and other countries. Of late years the most notable feature of the trade has been the increasing share Japan has had, partly explained by indirect imports from the United States and other countries through Japan. The trade has averaged in late years about \$250,000 gold annually, imports during the three years previous to 1911 being as follows:

Imported from—	1908	1909	1910
Hongkong	\$11,970	\$10,725	\$11,584
Great Britain	83,715	62,174	41,727
Japan	35,330	31,465	39,337
United States	49,120	18,518	13,044
Germany	18,517	12,101	8,680
All other countries	14,033	13,935	15,417
Total	212,685	148,918	129,789

There is great variation in the amount of such goods taken from year to year in the various ports, the explanation being that as modern hospitals and similar institutions are installed each port draws unusually upon the world for its equipment. For example, of the unusually large imports in 1909 Shanghai took almost exactly two-thirds. Tientsin also imported heavily that year. Ordinarily Shanghai imports about half of the total, Tientsin about a sixth, Dairen, Canton, and other open ports taking various shares from year to year as demand occasions.

Practitioners and Their Preferences.

The demand for medical and surgical equipment in China and the trade field reached through Hongkong varies in large degree accord-

ing to the nationality of practitioners. The physicians and surgeons in practice in this part of the world consist largely of missionary physicians and surgeons and English consular or port physicians and surgeons who either engage in general practice or, more generally, engage in practice in connection with some institution or service like the Chinese customs service. There are a few German and French physicians, but English and Americans are more numerous. It is significant that a physician usually prefers surgical instruments or appliances from his own country, the natural result being that most American imports in surgical lines are for missionary hospitals, while most English imports are for general practice in the open ports, though of course such is not the invariable rule. Considerable American medical goods are imported through Great Britain and Germany.

Dental Appliances and Apparatus.

In dental appliances, apparatus, instruments, and conveniences American goods control everything in high-class trade. American dentists have practically all the high-class business in their line and naturally prefer American equipment, while the merit of American appliances generally commends them to Japanese and other foreign-trained dentists practicing in this field. The number of Japanese and Chinese dentists practicing in Hongkong and the open ports in China is increasing greatly; the business, therefore, also expanding. Many of these practitioners are trained in the United States, some in Japan, and many learn their profession more or less perfectly as assistants in the offices of foreign-trained practitioners here. Chinese of the upper and middle classes are resorting to these foreign-trained dentists more and more frequently and prospects for the profession among these native practitioners are bright. However, for a number of reasons, as, for example, small fees received for most of such native work, the practice is not likely to attract highly trained American or other foreign dentists. The general increase in practice among native-trained men naturally affords increasing demand for materials and equipment.

Both in medical and surgical and in dental equipment there are indications that European trade in such lines is likely to be seriously threatened in the near future by Japanese and other Asiatic production, but high-grade practitioners will constantly demand American or European equipment, and the increased use of all such goods in connection with the changing life and manner of living in China affords a constantly widening market for American manufacturers in these lines which merits attention.

Expanding Trade in Medicines.

There has been a most satisfactory and significant growth of the trade in foreign medicines in China during the past few years, and the attention of American manufacturers and exporters of medicines and medical preparations should be given the field. The aggregate imports of foreign medicines into China at present amount to about \$2,000,000 gold annually, while imports into Hongkong for distribution into parts of the Far East other than China increase this total somewhat. Of the imports into China Hongkong furnishes about two-thirds, the goods actually proceeding largely from Great Britain, which also sends direct about 20 per cent of the total. One

of the significant features of the trade is the manner in which Japan's shipments of medicines into China have increased lately. The general situation of the trade is indicated in the following table of imports of medicines for three years previous to 1911:

Imported from—	1908	1909	1910
Hongkong.....	\$1,025,045	\$1,091,480	\$1,294,778
Great Britain.....	104,404	257,544	325,730
Japan.....	153,747	181,912	252,189
United States.....	15,752	19,623	29,630
All other countries.....	98,207	150,489	178,214
Total.....	1,397,155	1,701,048	2,080,541

While these returns show that the United States has but a small portion of the trade, American products are really taken in much greater amounts than are thus indicated. Some of the imports into China from Hongkong are of American goods imported into Hongkong from the United States direct, but the greater portion of American goods of this class generally is shipped by British branches or agents of American manufacturers and are therefore credited to Great Britain instead of the United States. The total trade in American goods is a considerable portion of the whole and the increase in the trade in general is largely in American goods. Pharmacists here say that the chief reason for this is the fact that Americans concerned in the trade are selling high-grade goods and selling them in more convenient and attractive form than their European competitors.

American goods also are becoming more and more popular because they are now marked as to their exact contents, a convenience which European goods do not have. However, there is not much question but that American trade in these lines can be considerably extended. The drug and medicine trade proper consists largely of imports of quinine, various preparations of Epsom salts, castor oil, calomel, and the like; tincture of iron and various tonic preparations; and in general the variety and proportion of drugs used and sold in the United States 15 or 20 years ago.

Character of Goods in Demand.

The trade in foreign patent medicines of many sorts is constantly increasing and several brands of goods are being introduced in large volume. The last English mail ship into Hongkong, for example, landed 500 cases of a certain brand of pills manufactured by an American company and sold through English houses. These goods and similar goods are being sold well into interior districts of China in advance of all foreign medicine practice. Several of the latest standard American disinfectants for the toilet table (listerine, glycothymoline, etc.) are being sold in largely increasing quantities. There is a strong demand for American dental preparations and similar goods. The list of patent tonics, invalid foods, and the like, on sale here, is being increased considerably and several well-known American and English patent preparations have been on the market for several years and their sales are increasing.

There is a constantly increasing trade in all lines of druggists' novelties, rubber pharmaceutical goods, tooth and similar preparations, toilet waters, plasters, and miscellaneous druggists' stock

generally. The wealthier classes of Chinese are commencing to use these novelties and luxuries to a greater extent and the use of the simpler and cheaper foreign medicines by the other classes of Chinese who come into touch with foreign practitioners or their Chinese students is increasing. While, as indicated, the great mass of the trade in standard drugs is in lines often considered somewhat out of date in the United States, American forms of various drugs are increasing in popularity and there is unquestionably a chance for the sale of American goods if they are presented properly. The use of American drug preparations is made difficult to a considerable extent by the fact that practitioners in most eastern ports are largely British in training and connections and are not familiar with American goods.

About 12 per cent of the imports of drugs into China goes to Shanghai and about the same proportion to Canton. Hankow, Tientsin, Swatow, Amoy, Chungking, Wuchow, and other ports follow in the order named, the ports on the coast in South China taking a much larger portion of the trade proportionately to their population than the ports of the north. With the opening up of China to foreign ideas, which is attending the revolution in its government, there is every prospect of an immense expansion in this trade.

Perfumeries and Toilet Accessories.

As is generally the case in the United States, most of the retail drug establishments in Chinese ports, including the native shops in these ports and in the interior, so far as foreign goods reach, handle perfumeries, toilet waters, and other toilet accessories in connection with their medicine trade. The import of such goods into China is increasing rapidly. One of the lines of foreign goods first used by many Chinese is that of cheap perfumery. The total imports of perfumery into China in 1910 amounted to a value of \$178,184, as compared with \$136,209 the year before, and total imports into the country, including the imports into Hongkong for local use and resale to other portions of the Far East, will reach at least \$225,000 annually. It is a trade capable of indefinite expansion, for the small peddlers and booth keepers in Chinese villages within reach of open ports handle these foreign perfumes as one of their chief novelties, and all classes of people buy the goods in whatever amount they may be able to afford. Of the imports into China at the present time Hongkong furnishes about one-fourth, the Netherlands about one-sixth, the United States and Japan each about one-eighth, with the rest divided among other nations in small proportion. The United States also furnishes a considerable portion of the imports from Hongkong. Shanghai takes over 30 per cent of the total imports.

There is a similarly growing trade in cheap toilet requisites of all sorts and it is a fact significant of the sort of goods which are popular that Japan in 1910 furnished about \$159,000 worth out of the total of \$281,000 imported. Hongkong furnished about one-sixth of the whole and Great Britain much of the balance. This class of goods includes particularly cheap face powders, tooth powders, small brushes, mirrors, combs of various sorts, sachets, and all those "novelties" which go to make up the stock of the Chinese peddlers or booth keepers who handle most of this trade. Considerable quantities of such goods are now made in Hongkong and in open ports in China.

One of the notable points to be considered in the trade in patent medical preparations and in perfumery and toilet requisites is the advisability of labeling the goods in Chinese or at least of wrapping them in special wrappers describing them in Chinese characters. The bulk of the trade in all such goods retailed to consumers is done in goods so marked.

SUEZ CANAL OPERATIONS.

[Compiled from Reuter dispatch from Paris, and other sources, supplementing advance item in Daily Consular and Trade Reports for June 11, p. 1084.]

The annual meeting of the Suez Canal Co. was held on June 3. The annual report showed that the year's operations had been brilliantly successful. The total receipts were \$26,870,516, an increase of \$843,656 over the previous year. This result exceeded all expectations, the loss entailed by the reduction of 10 cents per ton in the tariff being far more than made good, and justified a similar reduction to come into force on January 1, 1913. Thus, in three years, the tariff will have been lowered by 20 per cent.

After appropriating \$543,019 to the statutory reserve (making total \$6,747,915) and \$584,000 to the extraordinary reserve (making total \$1,549,000), the directors proposed to distribute \$16,950,112 (against \$15,908,419 in 1910), carrying forward \$66,000 (against \$42,114). In the statutory division of profits 71 per cent goes to stockholders, 15 per cent to the Egyptian Government, 10 per cent to the founders of the company, 2 per cent to the administrative officers, and 2 per cent to the employees.

The number of vessels that passed through the canal in 1911 was 4,969, representing a net tonnage of 18,324,794, an increase of 436 vessels, with a tonnage of 1,742,896.

From the following list of the six leading steamship lines traversing the Suez Canal it will be seen that the Ellerman Lines again had the greatest number of voyages.

Owners.	Tonnage.	Number of voyages.
Peninsular and Oriental.....	1,205,000	244
Ellerman Lines.....	1,158,200	286
Alfred Holt & Co.....	1,002,800	224
Hansa Line.....	847,600	215
Messageries Maritimes.....	603,400	172
Norddeutscher Lloyd.....	595,200	102

In recent years the rapidity and safety of transit have been greatly enhanced. A significant illustration was afforded by the passage of the Royal yacht conveying the King and Queen to and from India. The transits occupied only 12½ and 12 hours, respectively. Referring to the contributing sources of traffic, the report states that there was a falling off in cargoes of rice, of oleaginous grains, and still more notably of soya beans, the trade in which practically ceased owing to the plague in Manchuria. Again, business with China, from which such great things are expected in the future, was much hampered by the unsettled state of the country politically. On the other hand, there was great activity in the export trade of India, the consignments of grain reaching a figure never attained before. Trade with the Dutch Indies also developed largely, while Japan continued to extend commercial relations with Europe. Australia and the Oceanic Isles likewise contributed to the increased traffic. Brilliant as were the results of 1911, they have been more than maintained in the opening months of the present year.

DESIRE FOR INDUSTRIAL EDUCATION.

The ambition to secure technical instruction along industrial lines in the United States seems to be spreading. The following note from the Bureau of Education at Washington is one of the many indications of this movement:

The high school at Manatee, Fla., needed an industrial building, and as no funds were available for the purpose, the school children built it themselves. It is a one-story structure, built of concrete blocks, 25 by 50 feet. The blocks were made by the grammar-school pupils, the high-school boys put up the walls and roof, and the girls nailed on the laths for the plastering. The school is called the Kendall Industrial Institute, in honor of the high-school principal, who designed and supervised the work.

CEMENT PRODUCTION AND TRADE OF THE FAR EAST.

[From Consul General George E. Anderson, Hongkong.]

The cement industry of Hongkong and vicinity, which is the enterprise of one corporation but includes works in various portions of the colony and at Macao and Canton as well, has long dominated the cement trade of southeast Asia and at times has had a not unimportant share in the import cement trade of the Pacific coast of the United States.

At the last general meeting of this company attention was called to the growing competition in cement making in the Far East. In the course of his discussion of the situation the presiding officer at the company meeting said:

Competition continues unabated but has somewhat changed in form. European shipments to the far East have decreased and in the main can be ignored. The establishment of new factories in near-by territory is what interferes with us most, and some of these are gradually improving the quality of their product and increasing their output. There are probably more factories in the East than the average man realizes; for, besides the numerous Japanese establishments, including Manchurian, we have those at Tongshan (Tientsin), in Hupeh on the Yangtze, at Haifong, at Kuala Lumpur, and a new one at Padang in Sumatra, and there may some day be one at Manila. To offset the rise of these establishments we have the ever-increasing call for cement. And if this increase continues in years of stagnation and troubled trade such as we have experienced lately, what may it be when China settles to a steady course and the inevitable railway building comes into full swing?

Output of Existing Plants.

No mention was made of the plant under the control of the Chinese Government at Canton, which is not in operation for the time being. The chief competition for Hongkong at present is coming from Haifong. The Manila enterprise referred to is under the control of a Philippine corporation organized for the purpose and is reported as well under way.

The total ordinary maximum output of the plants mentioned, which are now serving to a great extent much of China, particularly south of the Yangtze, the Philippines, Indo-China, the Malay States, and Siam, as well as other countries in lesser degree, probably aggregates more than 2,000,000 barrels annually. The maximum output, according to the best information available, consists of the following, in barrels of 375 pounds each:

	Barrels.
Green Island Cement Co. (Hongkong).....	780,000
Ciments P. A. de l'Indo-Chine (Haifong).....	300,000
Chee-Hsin Cement Co. (Tongshan, Tientsin).....	300,000
Hupeh Cement Co.	288,000
Others.....	300,000

Maximum output.....	2,028,000
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China May Supply Its Own Needs.

Competition with each other has prevented any one of the establishments concerned in this eastern trade from running at maximum capacity, and this is likely to be the case for some time in the future. But, while competition has been and is likely to continue to be exceedingly keen, there appears to be no sound reason why all these plants shall not remain in the field. Each of them has more or less difficulties to overcome, but each has notable advantage either in the way of convenient and abundant supplies or unusually good shipping

facilities, and all have cheap labor, fuel, and other supplies, and a constantly increasing demand for their product.

It seems quite likely, therefore, that the prospective increased demand for cement in China will be met with a complete and satisfactory supply in or near China.

[From Consul Stuart K. Lupton, Karachi, India.]

India's Trade Comparatively Small.

The cement trade of northwestern India is comparatively small, as may be seen from the accompanying table of imports for the past five years, which means practically the entire consumption in a district with a population of some 45,000,000 people:

Year.	Casks.	Value.	Year.	Casks.	Value.
1906-7.....	15,591	\$38,126	1909-10.....	36,497	\$83,390
1907-8.....	20,107	51,934	1910-11.....	33,095	75,579
1908-9.....	22,729	59,181			

Most of the cement imported is of British manufacture. The brands chiefly used are Victor, Rhinosceros, Gillingham, Peters, Elephant, Red Cross, and Pyramid among the English marks, with Gladiator as the principal German brand.

Prices and Consumption.

British cement is quoted by the manufacturers to-day [Mar. 23] at \$1.95 per cask, c. i. f. Karachi, and after paying a duty and handling charges is sold in smaller quantities to the consumer at \$2.09 to \$2.13 per cask. As freight rates from Great Britain are 20 to 25 shillings (\$4.87 to \$6.08) per ton, this means that cement must be produced at the shipping point for 50 or 60 cents a cask to realize a profit.

At the present time the Port Trust and the Karachi municipality are using about 1,200 casks of 400 pounds each every month; but this extraordinary work will soon close, and I am credibly informed that the average monthly consumption of cement for all purposes will be about 200 casks for the next eight months or a year.

TRANS-PERSIAN RAILWAY ENTERPRISE.

[Report of Reuter's Agency, supplementing reports in Daily Consular and Trade Reports for May 11 and 28, 1912.]

The British Government has accepted as completely satisfactory the proposals now made for the international control of the projected trans-Persian line for linking up the Russian and Indian railway systems. The Société d'Etudes being formed in Paris will consist of a council of administration of 24 persons, composed equally of British, French, and Russian members, and including a president and two vice presidents. The president nominated is M. Raindre, a French diplomat of the rank of ambassador, the vice presidents being Sir William Garstin and M. Homiakoff, ex-president of the Russian Duma. The other members will include the leading British, French, and Russian bankers and eminent British and Russian and Indian engineers. In addition, there will be a representative committee of direction.

The question of the break of gauge between the Russian and Indian systems, on which the Indian Government has already expressed its views, is one of the many questions to be settled, but Reuter's Agency is informed that no difficulty is likely to arise over this matter as Russia is quite prepared to meet the views of India on this question.

COLOMBIA'S TRADE IN ALLIGATOR SKINS.

[Abstract of an article in the London Times.]

Alligator skins were not exported from Colombia prior to 1901, in which year efforts were made to establish the business, with some degree of success. In 1904 there was only one firm in the field, and in January, 1905, this firm was granted by the Government the exclusive right to hunt the reptile and export the skins for a term of five years. Some 20 stations were soon established along the lower Magdalena River and its tributaries, and parties of Indian hunters were fitted out and instructed in the best manner of preparing the skins. Success followed, the annual exports for the ensuing years averaging 30,000 skins. The concession expired in January, 1910, and alligator hunting is now free to all. It is a promising industry, which will increase in importance, especially if the various products of the reptiles can be put to other uses, as is expected.

Three different kinds of alligators are found in the Magdalena River. The *babilla*, which has a blunt, short head, small though numerous teeth, a dark-colored back, a deep yellow belly, and seldom attains a length of 5 feet, is of no value for its hide, which is made up of bony scales that turn to a stiff, brittle shell as soon as removed from the animal's body. The *caiman de aguja*, or needle-snouted alligator, has a light yellow belly, with a greenish and spotted back, and sometimes exceeds 24 feet in length and 6 feet in girth. These have large teeth of beautiful white ivory, sometimes 5 inches long and $1\frac{1}{2}$ inches in diameter. The largest skins are one-half inch thick and 80 to 90 square yards in area, but no use has yet been made of them, except as curiosities. The skins of this variety tan well, and have a pip mark in the center of each scale. The third class of alligators found in the Magdalena River is called the *caiman porro*, or thick, short-headed alligator. Its maximum length is not over 10 feet, and it has a pliant, merchantable skin, showing no pip marks.

Unlimited Supply of Alligators—Trade Centers in the United States.

There seems to be no likelihood of the extinction of these reptiles, whatever slaughter is carried on, as every full-grown female is said to lay about 100 eggs in a year. Alligator hunting is carried on along the Magdalena River from December to April and in July and August. During these rainless months the streams subside, draining the great alluvial plains which border the main stream. The alligators, which rushed out onto the inundated flats during the previous swelling of the river, crowd back through the connecting branches and channels, where the Indian hunters slaughter them in large numbers, spearing them and hauling them out on the banks, where they are stunned and then beheaded with long-handled axes. Rifles are not used owing to the prohibition of the use of firearms, except shotguns. Hundreds of alligators are also left stuck in the deep slime left by the receding waters, over which their short legs will not drag their heavy bodies. The animals are not molested in the main stream, as the swift current and deep water afford them easy means of escape. If a practicable trap could be devised the alligators could be easily and profitably caught by hundreds on the sandy beaches as they crawl out to sleep or bask in the sun. Only green-salted skins are used by the tanners, as the stiff, sun-dried skins are worthless.

The alligator-skin business of the world is controlled by a firm in Newark, N. J., which buys 80 to 90 per cent of the American production. It is significant that the sudden supply of 30,000 alligator skins per year from Colombia found such a ready market in the United States that they have invariably been purchased upon arrival at New York, on presentation of the shipping documents, even before unloading the cargo.

Repeated efforts of Colombian shippers to attract European tanners have been fruitless. Trial consignments were sent to London, Belgium, France, Austria, and Germany, the resulting sales scarcely paying expenses. Nevertheless, European manufacturers of fine leather goods annually buy large quantities of alligator leather from American tanners. The process of tanning is easy and economical. A simple apparatus that rapidly works a 2-inch agate stone with a backward and forward motion is all that is necessary to polish these skins rapidly, giving them a beautiful gloss that no artificial japanning or varnishing can imitate.

The prices paid by tanners at New York range from \$0.20 for a 3-foot skin to \$1.50 for those 7 to 10 feet in length, no discrimination being made in hides over 7 feet long. Prices have risen as high as \$1.95 for the larger sizes, with no selection, and they have fallen as low as \$1.15 with a selection that causes 40 to 60 per cent of a consignment containing damaged skins to be sold for one-third to one-half of the specified price.

Possible Utilization of By-Products.

A large amount of valuable material is now thrown away in collecting the skins in Colombia. The skin scrapings can be used for making glue; the teeth, a perfectly white ivory of medium hardness, can be worked into an endless variety of small articles; the grease, which constitutes a large part of the animal's body, gives a fine, clear, light yellow oil, resembling cod-liver oil, and is widely used among the natives for pulmonary diseases. There are 2 to 4 musk glands in each animal, and the flesh and bones could be used for fertilizer, if the former could not be suitably prepared for human or animal food. If the yearly exports were increased to 50,000 or 100,000 skins, the exploitation of the by-products could be brought to a profitable level.

The exports of alligator skins to the United States from the ports of Barranquilla and Santa Marta, according to the invoices certified at the consulates, totaled \$11,272 in 1910 and \$61,324 in 1911. In 1909, the last year for which export statistics of the Colombian Government are available, the exports of alligator skins from that country totaled 54,525 pounds, valued at \$6,660, of which 54,430 pounds, valued at \$6,645, were shipped to the United States.

ELECTRIC BATTERY VEHICLES IN ENGLAND.

[From the London Times.]

The announcement of the opening of a commercial campaign in London by American makers of electric-battery vehicles has again drawn attention to the curious difference between the total neglect of this method of traction in the United Kingdom and the enthusiastic multiplication of such vehicles in America. In Chicago alone there are over 2,000, and their average daily mileage is said to be 31, as against "probably 15 miles" for a horse van. The common explanation that the petrol (gasoline) drive has been brought to a higher stage in Europe does not appear to be wholly satisfactory; for it is not denied that what is called the "gasoline truck" is faster and is indispensable for "long-haul business," and the claims of the electric vehicle are based on its simplicity and economy for town deliveries. In a paper read before a sectional meeting of the National Electric Light Association in Chicago, Mr. R. Macrae assumed that the average daily consumption of energy was 9 kilowatt-hours, at a price of 4 cents per kilowatt-hour, and in the discussion that followed one speaker calculated that if one-half of Chicago's roadway traction were transferred to the electric-battery system the central-station revenue from charging would amount to \$4,000,000 a year. Attractive as this business is to the public supply authorities, it is not to be expected that skepticism in that quarter will be quickly overcome. The figures quoted are not at all convincing. At a New York meeting the record of 100 delivery vans of 1,000 pounds capacity was examined, and it was stated that, excluding depreciation, interest, and wages, the best performance over a period was 25 miles per day at a total cost of \$19.57 for 30 days; while the worst was 28 miles daily for a total of \$64.21. It is to be hoped that carefully observed trials will soon be carried out on this side of the Atlantic.

JAPANESE BEAN-OIL BARRELS.

[From Consul George N. West, Kobe.]

The usual Japanese cask or container used for sake, provisions, etc., is quite different in shape from that used in America, the sides being straight and the top wider than the bottom. Exporters of soya-bean oil use the foreign-style barrel. There is a factory which makes these, 2 feet 8 inches high, 2 feet diameter in the middle, 1 foot 8 inches diameter at the ends, and holding 12 cubic feet. The barrels are made of Japanese oak with iron hoops and cost \$1.80 to \$1.85. A German firm imports its own barrels, while an English firm uses empty ammonia drums which are being returned to the United States. A list of Kobe soya-bean oil exporters may be secured from the Bureau of Manufactures.

LOW TRAMWAY FARES IN ENGLAND.

[From Consul Augustus E. Ingram, Bradford.]

In view of the profits made by the Bradford city tramways, amounting to £40,000 (\$194,660), during the year ended March 31, 1911, of which £20,000 (\$97,330) was applied in relief of city taxes, the general manager of the city tramways has issued a report (a copy of which will be loaned by the Bureau of Manufactures) dealing with the advisability of instituting halfpenny (1 cent) fares, workmen's tickets, transfers, etc.

The report contains an interesting summary of the experiences of various towns throughout the United Kingdom where halfpenny fares have been tried. In Glasgow, where this system of fares was first introduced in 1894, a recent three-months' experiment, in which a ride of 1 to 1½ miles was given for a halfpenny, led to an increase of 50,000,000 to 60,000,000 in the number of passengers carried per annum. In Glasgow, however, there are long, level runs, great density of population, and consequently lower working costs. In Bradford practically every car ascends a steep gradient almost immediately after leaving the center of the city, as a result of which the number of cars on the road at these points is strictly limited.

The policy in Bradford has been to encourage migration to the healthier outlying parts of the city by giving fairly long distances for a penny (2 cents) fare. The Bradford Tramway manager concludes that halfpenny fares can not pay. By the time the passenger "has been picked up, his fare collected, and the risks of accident, etc., taken into account, his halfpenny has vanished into thin air, and he is being carried at the expense of the penny passenger, who is the mainstay of the receipts of most tramway undertakings." The hope is expressed that a universal penny fare within the city may yet be reached.

Prices of Tickets and Use of Transfers.

In regard to issuing return tickets for workmen, the policy most favored is that of cheapening all fares and not "drawing impossible distinctions between class and class." The total fares paid by his family are of more importance to the workman than his personal fare. Moreover, cheapening fares at the rush hours is a questionable policy. Diagrams are given showing the number of passengers carried during each half hour of the day, and the experiences of the Hull tramways are cited.

The sale of quantities of tickets at reduced rates is not recommended. It is contrary to the principle of simplicity of fare collection essential to successful tramway operation. Celluloid tokens, which are convenient to carry and are accepted by conductors for fare, are issued at the office of the Bradford Tramways at face value.

A tabulated summary of replies to inquiries respecting the issuance of transfer tickets and passes in other towns of the United Kingdom, is given in the report, and the conclusion is reached that the use of transfers is "extremely undesirable and impossible to work without extensive fraud." It is pointed out that in several cities in the United States, where transfers are in use, "it has been necessary to pass a special statute to prohibit illegal trading in these transfers."

It is urged in conclusion that as there are many indications that the tramway vehicles will undergo considerable changes in the direc-

tion of increased comfort for the passengers and safer operation, especially in methods of braking on steep gradients, it is desirable that no change of policy shall be made tending to deplete the funds and profits of the railway.

CANADIAN REFORESTATION MEASURES.

[From Consul Felix S. S. Johnson Kingston, Ontario.]

In 1911 the Ontario Legislature passed a reforestation act which empowered any county council, with the approval of the Minister of Agriculture, to pass by-laws for acquiring lands suitable for reforestation purposes, for planting trees on the lands so acquired, for protecting the resulting timber, for the management of both the land and the timber, and for raising money to an amount that will not increase the existing liability on this account at any one time to more than \$25,000. The intention of this legislation is to encourage the utilization of otherwise waste lands in a way that will at once make them a source of revenue and produce an ameliorating effect on the climate of the locality.

The county council of Hastings (in this consular district) has taken the necessary steps to bring the reforestation act into operation in that county. The Trent River from Rice Lake to the Bay of Quinte runs through Northumberland; above Rice Lake it traverses, under other names, the county of Peterboro and the provisional county of Haliburton. The main stream of the Trent, with its numerous affluents, runs through a rough country, most of it unfit for profitable farming but well suited for the growth of the Canadian pine which at one time flourished indigenously and abundantly there. The destruction of the forests by ax and fire has been in many places so complete that there are not enough trees left to seed the vacant places. Apart from the value of a second crop of white-pine timber, the process of reforestation will have the effect of regulating the available supply of freshet water so as to greatly improve the navigation of the Trent waterway, including not only the river itself but the lake expanses and its artificial channels.

PORTUGUESE VEGETABLES FOR EXPORT.

[From Vice Consul General James L. A. Burrell, Lisbon.]

There is one crop of potatoes suitable for exportation which continues from February until the end of July. The onion crop begins in August and ends the latter part of December, while the bean crop (red, white, and black-eyed beans being raised and exported) lasts from August to the end of November. The potatoes exported from Lisbon are of good size, and they, as well as the onions, are apparently able to stand a tropical climate, as large quantities are sent every year to the hot sections of South America.

Potatoes now bring about \$1.45 per box of 30 kilos (kilo = 2.2046 pounds) f. o. b. Lisbon, but are sold at times as low as 60 cents for the same amount. The prices vary greatly according to season, size of crop, and demand. The price of onions to-day (April 25) per box of 50 kilos is \$2.60 f. o. b. Lisbon. The prices, however, fluctuate, as in the case of potatoes. Red beans cost about 9.5 cents per kilo.

Potatoes are packed in wooden boxes holding 30 kilos each, onions in similar boxes containing 50 kilos, and beans in bags of 100 kilos.

COMMERCIAL NOTES FROM CHINA.

[From Consul General Samuel S. Knabenshue, Tientsin.]

Hats and Caps in North China.

The cutting of queues has been most popular in the south; here in the north a very large majority of Chinese still adhere to them. The recent demand for hats and caps is not in consequence of queue cutting, but of the adoption of western garments by Chinese. Naturally the two go together, but there are vastly more natives in the south who are adopting European garb than there are in the north. Not long ago one of the foreign retail merchants filled a large show window with Scotch caps, with the result that there was a crowd of interested Chinese in front of the window all day. There is no doubt that there will be a growing demand for hats and caps, especially in those cities like Tientsin and Peking in which there is a foreign population.

There are at Tientsin eight foreign concessions—Japanese, French, British, Austrian, Italian, Russian, German, and Belgian. The largest of these are the French, British, and German, and practically all the retail foreign trade is in these three concessions. The total foreign population in the eight concessions is about 3,000 men, women, and children, of course not including the soldiers of various nationalities. Those Chinese who buy foreign goods like caps and hats patronize these dealers. [A list of Tientsin retail dealers in hats and caps is obtainable from the Bureau of Manufactures.]

Quoting Prices to China Coast.

In writing to local firms American exporters should give prices and discounts and if possible make the price c. i. f. Shanghai or Tientsin. To quote prices f. o. b. an inland American city is too indefinite, because merchants here can not be expected to know what the railway charges will be on the goods to Seattle, Vancouver, or San Francisco, if sent that way, or to New York, if sent by freight steamer through the Red Sea. As a rule all large shipments for the China coast from the United States east of the Rockies come by the latter route because the ocean freights are cheaper. For sending a small shipment to a retailer in Tientsin, I would suggest that there are houses in Chicago which have special rates for shipments to China. They do a large business of their own and will take small shipments from anyone, to be forwarded along with their own. I understand these shipments are gathered until a carload is ready, when it is forwarded to Seattle to take steamer.

I lay much stress on giving the price delivered on the China coast, because I have known of several cases where American firms lost orders by not attending to this point. It takes two to three months for a letter from Tientsin to reach an addressee in the United States and receive a reply, hence everything that is necessary to enable a merchant here to judge should be in the first letter. British and German merchants understand this thoroughly, while American firms do not give it careful attention.

Amusement Devices at Tientsin.

So far as I am able to find out, the pool and billiard tables in use in the settlements here are chiefly of English manufacture, there being a few French ones in the French concession. The various clubs

and hotels have tables, and there are two or three bowling alleys. The Chinese of the merchant class also take very kindly to billiards and pool, and there are in the concessions several Chinese establishments which have tables.

GOVERNMENT FIRE INSURANCE IN GERMANY.

[From Consul Samuel H. Shank, Mannheim, Grand Duchy of Baden.]

Since 1758 there has been State fire insurance in the Grand Duchy of Baden. The law was changed at various times, but the one now in force was enacted substantially in its present form in 1852 and some slight modifications made in 1902. This law provides that each building erected must be insured with the State. The amount of insurance is the full value of the building. The value is entered at the tax office and premiums are paid to the tax collector. Private companies may insure only movable property.

The amount of damage by fire in the Grand Duchy of Baden from 1901 to 1910 was \$15,710,000. During 1910 there were 3,633 fires, of which 1,844 were in dwellings, 726 in rooms adjoining dwellings, and 694 in outbuildings. The origin of the fire was determinable in 2,376 cases. Intentional fires numbered 100; carelessness caused 256; children were the cause of 206; faulty construction occasioned 20; lighting was responsible for 519; sparks from locomotives, 17; factories caused 12; lightning, 331; explosions, 230; and spontaneous combustion was the origin of 83.

There were 2,923 buildings totally or partly destroyed. Of these, 1,057 were dwellings, 1,002 barns, 530 used for both dwellings and stable purposes, 58 public buildings, 257 industrial buildings. The number of fires in which only movables were damaged was 2,163.

Fire Losses and Casualties.

The total amount of damage was \$2,524,035, of which \$1,110,327 was on buildings, \$1,338,443 on movables, and the remainder was attributable to loss from damage by water. The amount of insurance paid was \$1,110,306 on buildings and \$1,118,168 on movables.

Of the total damage to personal property, 0.7 per cent was on live stock, 9.8 per cent on agricultural products, 1.3 per cent on fuel, 2.9 per cent on raw materials for manufacturing, 22.9 per cent on manufactured and partly manufactured goods, 14.7 per cent on furniture, clothing, and household effects, 47.7 per cent on machinery, tools, vehicles, etc.

The greatest number of fires occurred in January and December, over 400 each month. In 42 fires there were 19 occupants killed and 37 injured. There were 6 firemen injured, but none killed.

During 1910 in the city of Mannheim, with a population of 200,000, there were 565 fires, with a total loss of \$683,114, of which \$662,041 represented loss through a fire in a large machinery factory.

Russian Military Aviation.

A Reuter dispatch from St. Petersburg states that the Russian Council of War has decided to purchase 150 monoplanes built on the Nieuport system. Ten of the machines will be ordered abroad and 140 in Russia.

STATUS OF FOREIGNERS IN GERMANY.

[From Consul General A. M. Thackara, Berlin.]

Americans seek information relative to the position of foreigners in Germany. There would appear to be no limit to the time a foreigner may remain in Germany, as long as he conducts himself properly and in accordance with the German laws.

The tax laws vary in the different Federal States. A foreigner residing in Berlin becomes subject to a municipal tax on his income after three months and to an additional State (Prussian) tax after one year. In the case of Berlin, the two taxes are of equal amount. The State tax, on the basis of which the municipal tax is calculated, is itself based on the total amount of income of all kinds which the person to be taxed affirms that he receives. It is usual for the tax authorities to check the accuracy of the income statement made by the person to be taxed by comparing it with the income which is considered commensurate with the style of living which the individual in question maintains.

The municipal and State taxes are always based on the same sum. On an annual income of \$5,000 the two combined would be about \$300 at the existing rate of taxation.

There would appear to be no hindrance to a foreigner acquiring real estate. The rate of taxation on property of this kind in Berlin varies from year to year. In 1908 it was 3.15 marks (\$0.75) per 1,000 marks (\$238) of the appraised value of the property and in 1909 3.04 marks (\$0.7235). A sojourner in Berlin is normally subject only to the income tax. If he engages in business, however, special business taxes become applicable. Local conditions elsewhere in Germany, of course, vary.

Duties and Taxes on Automobiles.

The import duty on automobiles is based on weight, the rate of duty being 40 marks (\$4.52) per 100 kilos (220.4 pounds) net weight, for vehicles weighing $\frac{1}{4}$ to $\frac{1}{2}$ metric ton (2,204 pounds); 25 marks (\$5.95) per 100 kilos for vehicles weighing $\frac{1}{2}$ to 1 metric ton; and 15 marks (\$3.57) for vehicles weighing more than 1 metric ton. These rates also apply to second-hand automobiles. All automobiles imported for touring purposes for not over 90 days may be entered duty free, but they are subject to an imperial tax, depending on the length of stay in Germany, as follows: For a stay of one day, 3 marks (\$0.71); 2 to 5 days in a year, 8 marks (\$1.90); 6 to 15 days, 15 marks (\$3.57); 16 to 30 days, 25 marks (\$5.95); 30 to 60 days, 40 marks (\$9.52); and 61 to 90 days, 50 marks (\$11.90).

The days need not be consecutive. Those are deducted while the vehicle is in a German garage or a repair shop for repair or improvement, as well as the days during which the automobile may have been taken across the German border, providing the card of admission or tax card is stamped by the custom official at the border, both going out and returning to Germany. For further information in this respect, reference is made to an article on international automobile regulations in Daily Consular and Trade Reports for May 16, 1911.

COTTON SHIPMENTS FROM KIAOCHOW.

[From Vice Consul Henry W. Happell, Tsingtau.]

Local merchants are making valiant efforts to increase the export of native cotton, especially that raised in Shantung and south Chihli, through Tsingtau, and the report of the Shantung Railway shows that the enterprise has met with encouraging success. During the past year 543 hundredweight of the raw material were carried, while for the first quarter of 1912, 125 hundredweight were shipped via Tsingtau.

The attention of the cotton trade was first directed to China as a possible source of supply of that commodity in 1908, when prices in the American markets rose high. At first the cost of the raw material as well as the quality of the Chinese article proved an impediment to a successful export trade; but since 1909 the quality has improved and cotton dealers abroad are showing a decided interest in the large crops, owing to the superiority of the fiber, it being of a clear white color and silky touch. This is attributed to the careful tending of the young plants. The cotton is raised from local seed, as all efforts to raise plants with American seed have proved futile.

The railway traversing the cotton region has naturally been an essential factor in the rivalry for the transportation of that commodity, and the Tientsin-Pukow Railway, in connection with the Shantung Railway, has practically eliminated the carrying trade via the Grand Canal. Until recently this new trade of Tsingtau had not been felt by the other ports of North China, owing to its undeveloped cotton-gin industry, but now several cotton presses have been erected, and the finished bales can be put aboard vessels lying at the wharf for direct shipment abroad.

DIAMOND OUTPUT OF GERMAN SOUTHWEST AFRICA.

[From Consul W. J. Yerby, Sierra Leone, West Africa.]

The African World says, in a recent issue:

The production of diamonds in German Southwest Africa, according to the report of the German Diamond Regie, amounted in the year 1911-12 to 816,296 carats, which were sold by the company; the quantity was 798,865 carats in the preceding financial year. The average price realized was 25.602 marks (1 mark=23.8 cents) per carat, as against 26.775 marks in 1910-11, the reduction being chiefly attributed to the further decline in the size of the stones, of which 6½ formed 1 carat, as contrasted with 5½ stones per carat in the previous year.

Of the total production, 94.55 per cent was forwarded to Antwerp, 4.79 per cent to Germany, and the balance, 0.66 per cent, to London. A large portion of the diamonds forwarded to Germany was, however, sent abroad in an uncut condition, so that the German consumption scarcely amounted to 3 per cent. The total production was raised by 14 Southwest African companies, of which 5 were responsible for 96.32 per cent of the total. The net profits realized by the Regie amounted to \$203,420, and it is proposed to pay a dividend of 10 per cent, being the same rate as in 1910-11.

The output of the United Diamond Mines at Luderitzbucht amounted to 2,480 carats in March, against 2,075 carats in February.

The Financial News, of London, states:

It is officially announced that, owing to a new agreement between the Government and the Antwerp syndicate, German Southwest African diamonds will be sold at higher prices than hitherto.

[A previous report from Consul Yerby on the diamond fields of German Southwest Africa was published on Apr. 27, 1912.]

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9044. Stocking-knitting machines.**—An American consul in a Mediterranean country reports that a business man in his district requests to be placed in communication with American makers of stocking-knitting machinery. Correspondence should be in Italian, and prices should be quoted c. i. f. city of destination, if possible.
- No. 9045. Rosin, pimento, tallow, etc.**—A Russian firm, established in a large city for 12 years as agents representing various English concerns in the sale of colonial produce and various raw materials used by soap and color manufacturers, informs an American consulate that it desires to form connections with first-class American firms handling various articles, such as rosin, pimento, tallow, etc. References will be furnished, and correspondence may be in English.
- No. 9046. Shoes.**—A report from an American consul in Africa states that a trader in his district desires catalogues and price lists from American manufacturers of "one-price shoes."
- No. 9047. Sugar machinery.**—A company has been organized in a Latin-American country with a capital stock of \$500,000, one-third of which has been paid in, to erect a sugar refinery. The company proposes to put up a plant to produce 150 tons daily and expects to purchase about \$193,000 worth of machinery. American manufacturers of this class of machinery should communicate with the promoters in charge of such purchases, whose names are furnished by the American consul who forwarded the report.
- No. 9048. Fruits and southern products.**—An American consular officer in South America reports that a business firm in his district wishes to handle consignments of fruits from the Southern States, the Mississippi Valley, and Western States. The firm also desires to handle such products as naval stores, lumber, rice, cotton, sugar, tobacco, especially tobacco for cigarettes, etc. Correspondence may be in English.
- No. 9049. Wire-drawing powder.**—A report from an American consular officer states that a steel mill in a European country is in the market for American wire-drawing powder. Correspondence may be carried on direct with the factory and can be conducted in English.
- No. 9050. Moving-picture films and vaudeville.**—The proprietor of a new theater in a foreign country (a modern vaudeville and picture house just completed with American fittings throughout) desires to be placed in communication with persons in the United States controlling film rights and also persons capable of contracting for vaudeville performers of recognized ability. The American consul who forwarded this report writes that several theaters under one management with others acting under agreements form a circuit of considerable and constantly increasing importance in the country in question. Only films of the better class or artists with established reputations are desired. References will be given and required.
- No. 9051. Marine paints.**—An American consul reports that a business man in a Mediterranean country desires to be placed in communication with American manufacturers of marine paint. Correspondence may be in English and prices should be quoted c. i. f. city of destination.
- No. 9052. Buckles.**—An American consular officer in the United Kingdom has forwarded a sample buckle which was made in the United States, and adds that a business firm in his district is desirous of securing the name of the manufacturer of these buckles.
- No. 9053. Treatment for malaria.**—An American consul reports that the local government in a foreign country has recently considered new ways of extending the use of quinine, owing to the prevalence of malaria. A system of treatment has now been decided upon, and recently the first order for half a ton of quinine hydrochloride pellets was filled by a British firm. It would seem that large orders such as this would afford an opportunity for American pharmaceutical houses. Copy of the complete report can be obtained from the Bureau of Manufactures.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

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COMMERCE OF BOHEMIA.

CARLSBAD.

[By Consul Will L. Lowrie.]

Commercial interests of the Carlsbad consular district in 1911 were normal in every respect and showed little variation from those of 1910. The western part of Bohemia is a storehouse of natural wealth, and its manufacturing interests have developed until it is one of the most important industrial centers of Europe. The comparatively mild weather of the autumn and winter months was favorable for building operations, which engaged a large number of men. This is an important factor in the district, for the mineral spring resorts, Carlsbad, Marienbad, Franzensbad, and Teplitz, permit this class of work only between October 1 and May 1.

Effects of the Drought—Markets for American Goods.

The failure of crops in Bohemia as the result of long-continued and severe drought had its effect on the manufacturing industry of this district. Food prices advanced rapidly, and workmen were in a serious plight. The hardship was met in a measure by factory owners through the importation of large quantities of potatoes, fish, and other foods, which were sold to the employees at cost. In a few instances wages were increased to meet the unusually high cost of living. The lack of water affected the pulp mills, which sold all of their old stock at high prices, but were not able to manufacture new supplies. Paper mills also suffered and, in fact, all the extensive industries dependent upon water power were more or less seriously affected.

A fairly good market has been established for American products, and the demand is growing steadily. Probably 50 per cent of the principal stores in this consular district carry in their stocks some article of United States origin. American machinery is held in high esteem and one of the glass factories recently installed a glass-blowing apparatus, which has been so satisfactory that other concerns will

place orders. Cash registers, typewriters, and many other articles were in good demand. Several new lines of American products entered the local market during the year, and have been well received by the public. An agent at Eger made a serious effort to sell leather to shoe factories throughout Bohemia, but was met with the objection by the manufacturers that the American exporters would not cut the skins to meet their wishes and shipped leather of a grade inferior to sample. Unless more careful consideration is given to these matters, the trade may be lost entirely to Germany.

China and Earthenware Trade.

The year may be regarded as favorable for the china industry. Although the trade is still suffering from the overproduction of previous years, the various china factories have every reason to be satisfied with their sales, both domestic and foreign, especially the former, which have increased to a remarkable extent. Only the cheaper grades of china have profited by present conditions, as the market for fine china sets and fancy articles is still far below normal. China manufacturers universally complain about the falling tendency of prices, which, in spite of all their efforts, could not be prevented in the domestic market. In the export trade, where the Austrian manufacturers have to compete not only with each other but also with the German manufacturers, the tendency was also toward lower prices.

Methods of production have not changed. Wages remained about the same as in 1910, despite the strong efforts of the working class to force a raise. There were no particular periods of inactivity among the laborers. There was little change in the price of raw material, owing largely to the Austrian kaolin cartel. The freight on raw materials was increased on various railroads. The drought caused such an increase in the cost of transportation to the port of shipment as to make an appreciable difference in the profit on the export trade to America.

The growing preference for white or slightly decorated china evidenced in the previous year was noticeable. In spite of the strong demand and the general rise in the price of all commodities, it was impossible to bring about a rise in the prices of chinaware, as a lack of cooperation among the Austrian manufacturers prevented concerted action toward any radical change.

There was little difference in the range of the earthenware industry in 1911 and 1910. In both years the Leipzig fairs, which play a large rôle in the business, did not accomplish what was expected of them. The trade with the United States was also far from satisfactory to the manufacturers. The increase in the cost of raw materials continued in 1911, while the wages showed a rising tendency.

Unfavorable Conditions in the Glassware Trade.

The condition of the Austrian chemical and industrial glassware industry continues unfavorable and no signs of improvement are visible, according to the reports from the manufacturers. Prices of raw materials and wages are continually increasing, while the prices of the manufactured product, owing to foreign competition, have gone down rather than up. Conditions were such that various factories were compelled to shut down during the year.

As a result of the increased cost of living workmen demanded higher wages, which were not granted, and strikes and lockouts

resulted. Conditions will probably be worse in 1912, it being expected that there will be several well-organized general strikes in the glass industry.

Business with the United States was somewhat better in 1911 than in the previous year. In one factory, which makes a specialty of chemical glassware, this business amounted to approximately \$12,000 in 1911. Strong competition has been met in the foreign field, resulting in decreases of 15 to 20 per cent in prices in the past four years. Yet the price of raw materials has increased. For instance, potash soda now costs 5 to 12 per cent more than in 1908. Wages are much higher than they were several years ago. As an example, youths engaged as glass-oven helpers, who earned \$3.25 a week in 1909, now receive \$4.67, as there is a scarcity of such laborers.

In view of the fact that glass factories apparently can not make money except by large-scale production, the factory mentioned above will be enlarged by several additions and by the installation of a newly invented gas oven, as well as new machinery, which will require an outlay of over \$20,000.

The demand for fine engraved and cut glass, for which Bohemia is famous, was active throughout the year, and factories experienced difficulty in keeping up with their orders. A new style of etched glass was placed on the market and met with good demand. Its manufacture requires skilled operatives and the output was limited. The cost of raw material increased considerably, but wages showed little alteration compared with 1910. The greatest demand for artistic glassware comes from the United States, Germany, Russia, southern Europe, and Egypt.

Manufacture of Musical Instruments.

The last year was not particularly good for the musical-instrument industry. In various articles there was a slump of business, which was especially noticeable in the export trade of the Graslitz manufacturers. It was adversely affected by uncertain political conditions everywhere, resulting in a spasmodic rather than a uniform business.

The most important branch of the Graslitz musical instrument industry is the making of brass and wood wind instruments. The Graslitz product is always entering new territory, and in 1911 the instruments were sold on hitherto unexploited ground. The technical equipment has been noticeably improved and the productive power has been increased proportionately. The business in Europe was favorable and much more active than in the previous year, but the total export decreased. Buyers in the United States were reluctant about placing stock orders. There was a strong demand from Germany, Russia, and Austria-Hungary, but business with the Balkan States, owing to the outbreak of the Turko-Italian War, suffered a heavy setback. The price of raw material, resulting from keen competition between the dealers in such articles, was somewhat reduced. Wages and salaries had to be increased appreciably.

The business in stringed instruments was good. There were plenty of large orders to keep the manufacturers busy at all times. Prices of raw materials continued to increase and wages were advanced. Despite the great activity in the business, prices were

much reduced, so that the profits were lessened. Stringed instruments are manufactured largely by home industry, the small manufacturers selling their wares to jobbers and exporters, or to cooperative societies. The center of this industry is Schonbach, but Graslitz is now producing many instruments of this class, having done a particularly good business last year in fine-quality instruments. Gut strings are produced in large quantities, and business in this line was excellent, although the selling price was not adjusted to the cost of manufacture as there is much competition.

A branch of the industry that has made a phenomenal growth is the manufacture of machines for the making of stringed instruments—cellos, violins, guitars, mandolins, zithers, banjos, etc.—in which a big business is done with Russia, North and South America, and Italy.

Laces and Embroidery—Clocks—New Paper Fabric.

There have been no changes in wages at the lace and embroidery factories, although the increasing cost of living will make this necessary in all branches of industry. Raw materials were somewhat cheaper, but it is expected that artificial silk will increase in price shortly, owing to the formation of a trust.

America manufactures much artificial embroidery, and about all that the importers desire to buy from this district consists of novelties in fine cotton embroidery.

The export of clocks to America was somewhat better in the first half of 1911 than in the corresponding period of 1910, but the business declined noticeably in the last half of 1911. The rise in the prices of various raw materials, as well as the perceptible increase in wages, have contributed greatly to the unsatisfactory state of the export business.

A factory was built during the year at Fleissen for the manufacture of "textilose," a new substitute for jute. It is claimed that bags made of "textilose" are cleaner than those made of jute and as durable. The principal material is a special sort of paper spun into fine threads. It is uncertain how the industry will develop, but well-known capitalists of Austria and Germany have financed the enterprise.

Small Hop Crop.

The 1911 hop crop of this region was retarded by attacks of the aphid fly in the spring, followed by the abnormally dry summer, resulting in a reduced crop return. The umbels were smaller than in previous years, but of finer and heavier quality. The Saaz district produced 9,920,700 pounds, a little over half the normal crop. The 1910 crop amounted to 18,739,100 pounds. There were 27,821 acres under hop cultivation in 1911, against 27,248 acres in 1910, so that the average production in 1911 was 357 pounds per acre, and 688 pounds per acre in 1910. The other hop districts of Austria produced about 6,613,800 pounds of hops on 21,041 acres in 1911, against 12,676,450 pounds on 22,264 acres in 1910.

Germany produced 23,478,990 pounds of hops in 1911, on 65,873 acres, compared with 44,973,840 pounds from 67,870 acres in 1910. The statistics of the world harvest for 1911 are not yet available, but it is approximated at 132,276,000 pounds, produced on 234,700 acres, while the average annual harvest for the past 10 years has been 187,391,000 pounds. The shortage is partly made up from the un-

consumed product of former years, but the general consumption has greatly diminished as a result of the small crop.

The price of the 1910 hops rose as soon as the unfavorable harvest became evident. Saaz hops, which brought an average of \$26.39 per 110 pounds from September to December, 1910, sold for \$30.45 per 110 pounds in January, 1911, \$34.51 in March, \$36.54 in June, and reached \$40.60 by the end of July, 1911. The last 1910 hops were sold August 6 and 8, at \$54.81 and \$58.87 per 110 pounds.

High Prices of the 1911 Crop.

Before the first-picked hops were dry, August 8 to 10, 1911, they were in strong demand and brought \$60.90 and \$64.96 per 110 pounds. When knowledge of the short harvest in all the other districts became public, a sudden rise of prices began on August 11, the prices on that day rising to \$81.20 per 110 pounds. They rose to a maximum of \$93.38 to \$101.50 on August 16, and on September 1 stood at \$88.30 to \$93.38. On December 30 the prices were \$85.26 to \$91.35 per 110 pounds.

As the producers had not expected to obtain such high prices, they were in a great hurry to sell their product, and since the domestic and foreign brewers, as well as the dealers, were anxious to lay in their supply, about 70 per cent of the total 1911 production of Saaz hops was sold by the beginning of September. In spite of the relatively small crop, the hop producers had a remarkably good year, owing to the high prices, and many growers were in a position to improve their financial standing.

By far the greater part of the 1911 hops was sold to domestic consumers. The exports for September and October, 1911, totaled only 3,061,528 pounds, as compared with 8,252,920 pounds in 1910. This is explained by the high prices, for the foreign dealers preferred to content themselves with the purchase of old hops and those of cheaper quality. At the end of 1911 there remained approximately 661,380 pounds of the last crop of hops in Saaz, so that the market conditions are firm. As it may be assumed that all of the old hops will be used up by the beginning of the next harvest, there is reason to believe that, even with a good crop, the prices for next season will be high.

Increased Consumption of Beer.

Although the sale of beer in the winter and spring of 1911 was about the same as in the corresponding period of 1910, it increased about 25 per cent in the summer months, owing to the great heat, resulting in an increase in the total production of beer in this district. The output in the last three months of 1911 was the same as in the corresponding period of 1910. There is a general complaint among the innkeepers that, owing to the increase in the cost of living, people are drinking less beer than in former years. As a matter of fact, in spite of the higher hop and barley prices, more beer was consumed in this district in 1911 than in 1910.

The price of barley was higher in 1911 than it had been for a great many years, largely owing to the fact that, in view of the high price of feed, much barley was shredded and hence was not available for the brewing industry. The price of barley rose from \$1.84 to \$2.21 per 100 pounds, and hop prices were higher than at any time since 1882. As a result the cost of production of beer was from \$2.27 to

\$3.03 more per 100 gallons than in 1910, and many breweries were actually operated at a loss.

The cost of labor remained about the same as in 1910, but there is considerable agitation among the workmen for higher wages. Owing to the increase in freight charges, the price of coal has gone up about 20.3 cents per metric ton (metric ton=2,204.6 pounds). The price of keg wood has also increased to an appreciable extent. Owing to a good ice crop, most breweries that generally have to make artificial ice in summer were able to get along with their supply of natural ice.

Mineral Production.

There are three centers of the soft-coal mining industry in this region—at Brux, Komotau, and Falkenau—and the mines were operated with full forces during 1911. In the Brux district, 19,819 miners produced 13,000,000 tons during 1911, valued at \$12,466,000, of which 73 per cent was used in Austria and the remainder was exported. Each miner produced about 652 tons, valued at \$629. In the Komotau district, 2,226 miners produced 1,600,000 tons, valued at \$1,481,900. In the Falkenau district 5,016 workmen mined 2,780,000 tons, valued at \$2,505,000. The production of hard coal was about the same as in 1910.

A new wolfram mine was opened at Schonfeld in this consular district and the ore is said to be of a satisfactory grade. There was no export of the mineral during the year.

The discovery of radium has proved to be valuable to western Bohemia and especially to Joachimsthal, at the foot of the Keilberg, the highest mountain of the Erzgebirge. After long negotiations, the Austrian Government has secured a monopoly of the pitchblende mines and plans to produce 5 grams of radium a year. It has also opened an elaborate bathing establishment at Joachimsthal, where water charged with the radium emanations is used with good results in certain diseases. Vienna capitalists have erected a large kurhaus, and the village promises to be a rival of Bad Gastein.

Exports to the United States.

The following is a classified list of the declared exports to the United States from the Carlsbad consular district for the years 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Art objects.....	\$5,859	\$5,207	Laces.....	\$4,354	\$1,399
Bead fringes.....	12,649	8,194	Linen goods.....	14,085	28,129
Beer.....	16,509	14,649	Lupuline.....	3,066	1,753
China ware.....	845,121	730,156	Medical glassware.....	10,004	15,111
Clocks.....	4,249	8,847	Mineral salts.....	30,525	41,663
Cotton tinsel thread.....	3,114	7,978	Mineral water.....	18,637	17,307
Dress goods.....	3,645	6,453	Musical instruments.....	146,420	158,353
Dresses.....	5,185	6,483	Sundries.....	7,298	5,266
Earthenware.....	59,500	45,934	Toys.....	53,024	53,977
Embroideries.....	9,805	23,981	Trimmings.....	19,712	.....
Furs.....	799	21,228	Woolen goods.....	1,210	7,213
Glassware.....	45,640	46,441	All other articles.....	10,452	5,214
Gloves.....	4,556	13,751			
Hops.....	358,616	342,209			
Human hair.....	6,024	.....	Total.....	1,701,259	1,008,747

The exports to Porto Rico and the Philippines totaled \$2,879 in 1910 and \$1,436 in 1911, and consisted of mineral water, chinaware, and glassware.

Mineral Water, Tourists, Etc.

The greatest source of income of the district is derived from the mineral springs at Carlsbad, Marienbad, Franzensbad, Teplitz, Giesshübl-Sauerbrunn, Neudorf, and Bilin. Mineral water and salts valued at \$58,969 were exported to the United States from these cities in 1911, as compared with \$49,162 during 1910. The four great spas of the district were visited by over 100,000 people from all parts of the world who came to take the cure and by 250,000 tourists. About 4,000 of the former and 3,000 of the latter were Americans. The number of annual visitors is increasing rapidly and they bring with them a vast income for the residents of the district.

PRAGUE.

[By Consul Joseph I. Brittain.]

The excessively dry weather in Bohemia during 1911 did much damage to all agricultural products and increased the cost of living. Sugar, milk, butter, and all vegetables advanced greatly in price, and many farmers were obliged to dispose of live stock on account of the short supply of feed and pasturage.

There has been a gradual advance in the cost of living in Prague during the past few years. Increased taxes and a general expansion of business have caused sharp advances in rents, ranging from 20 to 100 per cent. Dwellings in the business section rent for \$121 to \$203 a year per room above the first floor, and business rooms are much higher. Apartments are generally rented subject to three months' notice by renter or landlord, and time leases are made in some cases. Owing to the high taxes and other expenses some of the best buildings in the city net their owners less than 3 per cent income. Landlords are required to pay in taxes nearly 50 per cent of the rent received from tenants, besides income and various other taxes. New buildings are exempt from a portion of the tax for a number of years.

Prague a Banking Center—General Progress in that City.

Prague is one of the leading banking centers of Europe. Many of the most valuable properties on the two leading streets are occupied by banks, and some fine new buildings are being erected. Besides their regular banking business, these banks have commercial departments which manage many of the leading industries, such as sugar and alcohol refineries, automobile works, furniture factories, etc. The leading banks pay 4½ per cent interest on running accounts, 4 per cent on savings book accounts, and 4½ to 5 per cent on time deposits.

The electric railway lines of Prague were extended to several of the suburbs during 1911, and about 9 miles of extensions will be built during 1912. On January 1, the fares for short distances were increased 17 per cent and the long-distance fares 10 per cent. The reduced rate monthly books were withdrawn. The wages of the employees were not advanced and this may cause a strike. During 1911, 54,825,203 passengers were carried on the Prague lines, 9,315,203 more than in 1910. The receipts for the year were \$1,561,831, an increase of \$172,093 over the preceding year. The lines are owned by the municipality.

The new water plant, which has been under construction for four years, will probably be completed during 1912, and the new sewer

plant is nearing completion. Two new bridges are being built, one of concrete. The improvements on the Moldau River are to be finished in 1914, when navigation between Prague and Hamburg will be opened.

There has recently been organized in Prague a society for the study of English, with over 200 members. They will have a large reading room, where the leading magazines, newspapers, and trade journals will be kept. The trade papers received at this consulate, about 40 in number, are passed on after a few days to the various public reading rooms, for the benefit of the English-reading commercial public, and some will be sent to the library of the new society.

Methods for Promoting American Goods.

An official of the largest manufacturing company here, which uses American tool machinery, says that since 1892 the greater part of such machinery has been purchased in the United States, but unless our manufacturers and their agents increase their efforts, the tide will turn in favor of German machines, not because of any fault in the American product, but because German factories are near by and their agents are persistent.

Bohemian manufacturers make greater efforts to sell their products in the United States than do the American dealers to sell their goods in Bohemia. At the exhibition of brewers' products in Chicago in 1911, one of the Prague hop exporters had a representative and a model of his hop warehouse and drying plant, at a cost of at least \$1,000. Another exporter says that he spends a large amount for samples sent to prospective American customers, while a third has invested over \$10,000 in office furniture and rent for the display of his products. On the other hand, there are many instances of the reluctance of American manufacturers to supply samples for the development of trade. In one instance, a sample was requested from an American firm of an article which it was thought might sell here. After two months' delay, the sample arrived, accompanied by a letter asking for payment of the wholesale cost, 75 cents, and the parcel postage, although it could have been sent as a sample more cheaply by open mail.

Many American exporters have succeeded here, often against heavy odds. Among these are manufacturers of cash registers, computing machines, typewriters, machine tools, vacuum cleaners, sewing machines, agricultural machinery and repair parts, canned and evaporated fruits, box-making machinery, hard-coal stoves, razor strops, safety razors, shaving soaps, shoes, shoe leather, shoemaking machinery, fountain pens, electric vibrators, clothes wringers, moving-picture films, picture-frame moldings, shoulder braces, raw cotton, and numerous small articles.

There is no free baggage allowance on the railways of Austria, but traveling salesmen may obtain from the mayor or other highest authority in any community a certificate of identification and a permit. These, with a certificate issued by the chamber of commerce of the district, entitle the salesman to 50 per cent reduction on the freight rate on his samples. Annual, quarterly, or monthly tickets, which permit as many trips as desired, may be obtained at greatly reduced rates.

The absence of Americans in business in Bohemia handicaps American trade. There are over 1,000 German citizens residing in Prague,

many of whom are engaged in business. Few Americans live here, and the majority of these are naturalized citizens who have not been in the United States in years and are out of touch with the country.

About a year ago this consulate adopted the policy of furnishing information as to the possible market, style of goods on sale here, etc., to Americans who inquired for the names of dealers in various lines. This additional information has been much appreciated by exporters, and the commercial correspondence of this consulate increased over 50 per cent in 1911.

Sugar Mills—Breweries—Crop Returns.

There were 108 sugar mills in operation in Bohemia during the 1911-12 season, and 196 in all of Austria-Hungary, against 116 in Bohemia and 203 in the entire country in 1910-11. The beet crop of Austria-Hungary in 1911 was 7,856,500 tons, of which Bohemia furnished 2,157,600 tons, against 10,252,500 tons for the entire country and 4,532,400 tons for Bohemia in 1910. Of 1,154,300 tons of sugar produced in Austria-Hungary in the 1911-12 season, Bohemia produced 521,600 tons. The corresponding figures for 1910-11 were 1,522,785 tons and 716,682 tons, respectively. The price of sugar, exclusive of the excise duty, ranged from \$4.02 to \$8.73 per 220 pounds. The highest price for refined sugar was \$20.35 wholesale and \$21.11 retail, per 220 pounds.

There were 561 breweries, producing 1,088,380,400 quarts of beer, in operation in Bohemia in 1911, against 571, producing 1,035,546,400 quarts, in 1910. In the 1911 production there were consumed 177,000 tons of malt, 3,431 tons of hops, and, for heating and steam, 400,000 tons of coal. The average price of barley was \$3.97 per 220 pounds, and hops averaged \$30.45 per 110 pounds during the first half of the year, and \$88.30 during the latter part. The consumption tax on the production of beer in 1911 amounted to \$7,714,000 and the city tax to about \$4,060,000.

In consequence of the high production cost, the price of beer was raised 39 to 58 cents per 100 quarts. A contemplated advance of the beer consumption tax from \$0.66 to \$1.54 per 100 quarts would cause another rise, and is consequently being met with strong protests, especially from the laboring people, who receive very low wages.

The potato crop of Bohemia in 1911 was 1,700,000 tons, while the average annual crop for the three preceding years was 3,000,000 tons. The hay crop decreased from 1,700,000 tons in 1910 to 1,200,000 tons in 1911. There was also a shortage of about 500,000 tons in the crop of fodder clover. The four leading grains, wheat, barley, rye, and oats, showed a shortage of 200,000 tons below a normal crop. Practically no corn is grown in Bohemia, as the warm season is short and the nights are too cool.

Sales of Agricultural Machinery, Gasoline Engines, and Automobiles.

Crop failures and the increased activity of the Bohemian manufacturers made the sales of American agricultural machinery in Bohemia smaller in 1911 than in previous years. There are several factories in Bohemia making agricultural machinery and many of the reapers and mowers are pure imitations of American machines. Factories are also making full lines of repair parts for American machines, depriving the American makers of considerable profitable

business. The local manufacturers resort to all kinds of price cutting. More interest is taken in gasoline traction engines and there is an increased demand for gasoline engines for feed cutters, thrashing machines, sawmills, etc. American manufacturers of agricultural machinery should have more exhibits at the Prague agricultural fairs.

The sale of automobiles is gradually increasing, but the market is limited, on account of the inability of the people to purchase cars. With 600,000 population, this city has less than 700 cars. The cars of local make are not considered equal to those from France, Belgium, Germany, Italy, or the United States. American cars are much admired and one agent recently contracted for 40 of them, but the American manufacturers have not exhibited here as yet. A poorly constructed, cheap car is not in demand. There are not many motor trucks in use here.

Depressed Cotton Industry—River Traffic.

The cotton industry was much depressed during 1911, and the spinning mills were obliged to reduce their output 20 per cent. The weaving and the cotton-printing businesses were also dull, with prices low. The exports were about the same as in 1910. The imports were small, especially of cotton yarns. There were numerous business failures. Stocks were low at the weaving mills at the close of 1911, but the outlook for 1912 was much brighter. As a result of the dull business of the past few years, the organization of cotton printers has purchased and closed several printing establishments.

The water in the Elbe River was said to have been lower during the summer of 1911 than at any time in the preceding 50 years, and traffic was suspended from July until October. The total traffic decreased from 2,200,000 tons in 1910 to less than 1,500,000 tons in 1911, the greatest decrease being in the shipments of brown coal, sugar, petroleum, malt, and barley. Boats were able to run from Prague to the confluence of the Moldau and the Elbe, owing to the new dams and locks. When the waterway to Hamburg is completed, in 1914, boats will be enabled to go from Prague into Germany even in dry weather. Water rates from Hamburg are much lower than railway rates.

Fruit Imports—Slaughterhouses.

Fruit imports were larger than usual in 1911 as a result of the partial failure of the Bohemian fruit crop. Several cars of fresh apples were imported from Canada and some from the United States. These sold at 5.9 to 11 cents a pound. Common apples from Australia, packed in barrels, sold at 9.2 cents per pound. Peaches from South Africa brought 16 to 20 cents each. Domestic apples of fine quality, known as Calville apples, are packed in cotton and retail as high as 30 cents each.

There is a market here for carefully packed American fruit of the finer grades. The sale of evaporated fruit from the United States is increasing. One dealer last year sold over 30 carloads of California fruit. On account of the high duty on canned fruit—7.83 cents per pound—only a limited quantity is sold. The local canned fruit is inferior to the American product.

At the Prague municipal slaughterhouse 40,217 head of cattle, 5,908 calves, 26,829 sheep, 492,938 hogs, and 3,480 horses were slaughtered during 1911, the total of 569,372 being an increase of

108,352 over that for 1910. The largest number of cattle were slaughtered in May, and the largest number of hogs in November. The largest number of cattle killed in one day was 388. The average price paid for cattle on the hoof, per 220 pounds, was \$18.76 for domestic animals and \$17.89 for cattle from Galicia and other parts of Austria. The average price of meat per 220 pounds was: Mutton, \$62.92; veal, \$33.02; domestic pork, \$28.15; Galician pork, \$31.91; Servian pork, \$34.50; lamb, \$26.85; beef, \$26.75 and \$29.35. Kids sold at \$1.11 each. The slaughterhouses are owned and operated by the city and are clean and well conducted.

Besides the animals slaughtered here meat carcasses were shipped in as follows: 3,829 sheep, 34,105 calves, 1,830 hogs, 4,098 lambs, 5,045 kids, and 4,905,212 pounds of beef and pork.

Exports to the United States.

The exports to the United States direct from Prague were \$151,150 less in 1911 than in 1910. The heaviest decreases were shown by beans, ladies' lambskin gloves, and human hair and hair goods. The shipment of human hair into Austria was prohibited for a time on account of the plague in China. Much of this hair is treated and reshipped to the United States. The following table shows the principal items exported to the United States as invoiced at this consulate in 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Beans.....	\$126,223	\$29,512	Oil, sod.....	\$13,478	\$13,290
Beer.....	864,533	873,499	Paper and paper goods.....	30,052	25,416
Books.....	124,894	152,069	Paraffin.....	60,430	37,524
Buttons.....	35,486	16,895	Porcelain and pottery.....	5,808	3,169
Capsules, metal.....	40,613	45,081	Rice, granulated.....		37,232
Chemicals:			Seeds:		
Barium chlorid.....	23,943	23,587	Clover.....	129,112	250,829
Carbonate of potash.....	7,564	36,905	Sugar-beet.....	32,849	40,329
Oxid of zinc.....	15,244	12,273	Siphon bottles.....	101,431	89,215
Potassium permanganate.....	7,295	13,565	Smokers' articles.....	4,873	6,877
Dress goods.....	21,298	7,853	Steel, tool.....	63,233	52,862
Furniture.....	23,546	29,619	Talc.....	5,768	930
Glassware.....	105,626	109,025	Tinware.....	18,713	26,995
Gloves, ladies'.....	265,571	155,412	Wool, carpet.....	63,262	6,274
Glue and glue stock.....	20,937	8,084	All other articles.....	65,266	79,074
Hair, human, and manufac- tures of.....	394,184	146,575	Total.....	3,147,517	2,906,367
Hops.....	486,285	666,397			

American goods valued at \$617 were returned during 1911. The exports from Prague to the Philippines in 1911 amounted to \$2,000, and to Porto Rico \$2,808.

REICHENBERG.

[By Consul William J. Pike.]

The Reichenberg consular district has 2,000,000 of the 7,000,000 inhabitants of Bohemia, and its industrial importance is indicated by the fact that 106,000 of the 198,000 manufacturing firms in Bohemia are located in this district. Its factories employ 500,000 of the 700,000 workmen employed in Bohemia, and it pays over 48 per cent of the taxes. The principal industries of the district, in the order of the number of employees, are the manufacture of textiles, jewelry, glassware, porcelain, paper, artificial flowers, clothing, and millinery articles.

The abnormal dryness of 1911 reduced the crop production of this region to fully 50 per cent below that of 1910 and also seriously

affected the industrial branches by causing a cessation of water transportation and necessitating the heavy importation of food products. The shipments of coal, forest products, etc., were lessened by the loss of the cheap water freight rates. The saving feature for the agriculturist was the general advance in the price of his products.

Reports from the various industries show a material increase over the preceding year in the value of products, with steady prices, and seem to indicate that 1911 may on the whole be considered as satisfactory to industrial northern Bohemia. Of the 20 important factories built in this region during the year, 7 were branches of large German firms. One of the most important undertakings was the erection of a 12,000-spindle spinning mill. The number of new factories in other lines were: Cloth, 5; glass, 4; ironware, chemicals, agricultural machinery, 2 each; electrical supplies, medical supplies, and proprietary medicines, 1 each. Among the causes that lessened the sales of certain lines of goods were the loss of large markets in the East on account of wars there and the general unsettled conditions.

Poor Year for the Textile Trade.

The most important industry of this region is the manufacture of textiles, in which the United States is concerned, as at least 150,000 bales of American cotton annually find a market here when the mills are working at full capacity. It is said that there are fully 1,250,000 cotton spindles in northern Bohemia, which is nearly one-third of the entire number in Austria-Hungary.

The year 1911 did not start auspiciously for the textile trade, but the season was far worse than had been expected, and especially productive of strikes, lockouts, and the voluntary closing of factories. With the ruling high price of cotton, these made the year unremunerative for weavers, spinners, and printers. The organized groups of spinners curtailed production 25 per cent, but their action did not bring yarn prices up to the proper ratio to the cost of raw material.

In consequence of the accumulation of heavy stocks of yarns, held in expectation of better prices, additional taxation, the loss of cheap freight rates because of closed water routes by reason of drought, and the forced selling at any price obtainable, it is generally believed that not a single spinning concern realized more than 4 per cent upon capital invested, unless by fortunate speculation in the market.

The cotton weavers and printers found work scarce and the prices obtainable for goods out of all proportion to the cost of production, notwithstanding a great reduction in output. Not until the latter part of 1911 was there an improvement noticeable, when, because of prevailing and threatening strikes, wages had to be advanced, which further added to the already excessive cost of production.

While the strikes induced buyers to increase their purchases and assisted the mills in disposing of large accumulations of stock, it would be wrong to assume that weaving establishments bettered their condition. The increased demand caused the spinners to advance prices in yarns, which left the manufacturer with no better margin.

The business in colored goods, in keeping with the entire cotton industry for 1911, was poor, and manufacturers of zephyrs especially suffered because of the sudden change in fashion and the lack of demand for these goods, which normally constitute one of the chief lines of the colored-goods trade.

Competition in printed cotton goods became acute during 1911, principally on account of the withdrawal from the Cotton Printers' Association of an important firm, owning a controlling percentage of the printing machines in Austria. Exports showed a slight increase, but this was solely due to the cutting in prices to meet competition abroad and in some cases brought the price below the cost of production.

The principal foreign markets enjoyed by the textile trade in order of importance are as follows: Germany, France, England, Balkan States, Turkey, Greece, Italy, Egypt, India, United States, and South America.

Bohemian Linens and Glassware.

The manufacture of Bohemian linens has reached a perfection in this district which makes it world known, and its product finds a ready market in every civilized country. About 35,000 people are employed in this trade. An inferior quality of Russian and domestic flax, a scarcity of skilled labor, and a hitherto unknown lack of water all contributed to make 1911 an unsatisfactory year. Attempts were made to advance prices to meet the unfavorable conditions and the increased costs of material and production, but without much success. Values were also weakened by the favorable prospects for the new flax crop in the autumn, which influenced buyers to hold back orders. Home consumption was below normal. Germany bought only moderately, England and Italy were scarcely in the market at all, as compared with other years, and these factors, added to the wars in the East and the reserve of American buyers, made the trade unsatisfactory.

The quality and quantity of home-grown flax were fairly satisfactory in 1911, although not up to what had been expected from the increased acreage put in cultivation. The drought was detrimental to both the growth and the process of steeping.

The manufacturers of Bohemian glassware and of porcelain experienced a fairly prosperous year during 1911, although there was a smaller demand for some articles toward the close of the year. These two trades give employment to 52,500 workmen and have a total output of \$23,000,000. A number of new factories have recently been erected, and it is interesting to note that American machinery has been installed that has proved highly satisfactory, both in saving labor and in the character of the product. Hollow and pressed glass and cut-glass articles, especially those for settings of silver and German silver, were in good demand for both the home and export trade. North and South America, England, the Netherlands, Belgium, and the Balkan States form the best foreign markets.

Jewelry Making at Gablonz—Banking Facilities.

It is doubtful if any other community in the world engaged in the manufacture of the cheaper grades of jewelry produces more artistic and delicate articles than the workmen of the Gablonz district. This industry dates back into the Middle Ages, and, through long experience and the aid of special technical schools, the workers have developed a wonderful degree of skill. This district is the chief market of the world for imitation precious stones and supplies most of the manufacturers of the cheaper grades of jewelry in every country. Only a small percentage of the stones are made by machine, the machinery being of recent invention. The greater portion of

the enormous output is hand cut. For this trade in general, 1911 was much better than 1910, especially in the market for fancy buttons, decorative glass ornaments for chandeliers, etc., and the production is estimated at \$20,000,000. Exports increased to all countries except the United States.

In the small city of Reichenberg alone, with a population of 37,000, 10 new and important banking institutions have been established within the past decade, and conditions were so favorable that a number of new concerns were organized in this district in 1911. Five were started in two cities. The larger banking houses pay 4 per cent interest on checking accounts, and the rate rarely falls below 3½ per cent, while 4½ and 5 per cent is frequently paid in the smaller savings banks and associations, which are considered perfectly safe. In Reichenberg alone, the deposits in three savings banks amounted to \$14,210,000.

Opportunities in Bohemia for American Trade.

It is a matter of serious doubt if this district offers great opportunities for the direct importation of American products, as there are no large or populous centers, nor are there concerns doing an import business. Prague is the largest city, with 37,000 population, and there are 13 other cities having 10,000 or over. The purchasing power of these communities is not comparable to like municipalities in the United States. While a fair amount of American goods are to be seen in this district, such as typewriters, sewing machines, cash registers, adding machines, office furniture, toilet articles, dried fruits, canned goods, etc., investigation shows that in every instance they were bought through large importing firms in Hamburg, Bremen, Berlin, or Vienna, and generally sold in the local market by traveling representatives of the importers.

While the purchasing power of the people is fully up to the average of European countries, the market can best be reached by the establishment of branches in large seaport towns, or by business connections with foreign importing houses which canvass the territory. Illustrated catalogues printed in English, in most cases, only serve to give ideas to the ever-watchful competitor.

Exports to the United States.

The exports from this consular district to the United States, as shown by the invoices declared at this consulate, were as follows during 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Beads.....	\$114,521	\$248,705	Metal ware.....	\$12,360	\$11,727
Buttons, glass, ivory, etc.....	97,715	104,183	Needles.....	14,997	19,837
Carpets and rugs.....	89,166	77,100	Porcelain and pottery.....	18,095	12,566
Cotton goods.....	95,225	67,897	Stones:		
Cutlery.....	39,669	33,035	Precious.....	12,162	7,612
Flowers, artificial.....	104,691	61,764	Imitation.....	762,223	538,511
Glassware.....	248,690	264,209	Sparterie.....	35,315	25,229
Hair, human.....	15,961	741	Woolen manufactures:		
Hops and lupulin.....	82,005	42,640	Blankets.....	8,304	11,453
Hides.....		12,078	Other.....	128,549	65,219
Jewelry, etc.....	679,461	421,056	All other articles.....	64,814	41,052
Lamps, etc.....	121,965	123,585			
Linens.....	438,120	431,232	Total.....	3,184,008	2,621,430

The exports from Reichenberg to the Philippines amounted to \$15,190 in 1910 and to \$14,403 in 1911. Enamel ware was the

principal item in both years, being valued at \$12,072 in 1911. To Porto Rico were sent goods valued at \$1,131 in 1910 and at \$1,475 in 1911. The exports from Reichenberg to Hawaii totaled \$691 in 1910 and \$775 in 1911.

FURTHER COMPLAINT OF SHORT-PAID POSTAGE.

[From Vice Consul Wm. H. Orrett, Kingston, Jamaica.]

Letters from the United States insufficiently stamped continue arriving in Jamaica. Of course, in the case of such short-paid letters being received here the postage has to be paid with a penalty charge, but several merchants have informed me that they invariably refuse to receive them, especially when the letters are from new firms. No doubt the mistake arises from the fact that many American firms are under the impression that the 2-cent rate now in vogue between Great Britain and America also applies to the British colonies. American postmasters might perhaps be able to remedy the trouble by causing a notice to be placed in the respective post offices.

Simple Plan Suggested.

The manager of the foreign department of one American company describes to the Bureau of Manufactures his method for insuring full postage on foreign letters:

It seems to me a very simple rule, instead of leaving the determination of the amount of postage to a mailing clerk, who in the average office is a more or less irresponsible office boy, to have the stenographer who addresses the envelope for a foreign letter mark the amount of postage prominently in the upper right-hand corner, where it can not be overlooked in stamping. This easily becomes a matter of routine for the stenographer in the habit of writing foreign letters and the result is well worth the small amount of time involved.

I might suggest, further, that the manager of the department, who is the one to really have the matter at heart, after signing a foreign letter, glance at the envelope to see that the stenographer indicated the amount of postage. This would serve as a double check on the system. In cases where I have doubt as to whether a foreign letter may be overweight, I place a "?" after the amount as a hint to the mailing clerk to weigh it before stamping.

FRUIT GROWERS TO IMPROVE PACKING.

The Grand Junction Fruit Growers' Association of Grand Valley, Colo., has decided to improve its apple packing by the adoption of the following measures:

Use of the uniform layer pack.

Registration of packers.

Establishment of schools for instruction of packers.

Growers of the section say:

Fruit growers of the Northwest have used the layer pack two years. It necessitates grading of all apples, but makes a beautiful looking box and one which sells more readily than the jumble pack used here. Registration of packers and schools for instruction of packers are new moves. Registration will insure an honest pack. The schools will be conducted in every section by experts paid by the association.

The Chicago daily package-car service is described and illustrated in the May 31 issue of the Chicago Commerce, published by Chicago Association of Commerce. Maps show the break-bulk points. J. F. Morton, superintendent of the package-car service also announces that the sixth edition of the freight traffic committee's handbook, entitled "How to ship," is now ready.

SULPHUR, PYRITE, AND SULPHURIC ACID.

[From advance chapters from Mineral Resources of the United States, issued by the Geological Survey; see also Daily Consular and Trade Reports for May 3, 1912.]

The production of sulphur in the United States in 1911 amounted to 265,664 long tons, valued at \$4,787,049, as compared with 255,534 tons, valued at \$4,605,112, in 1910. In determining the value of most of the sulphur produced in 1911 the current market prices in New York were taken, from which the value at the mine was then computed. It is estimated that the production for the year 1911 is very close to the present rate of consumption.

Prices remained fairly constant throughout the year at approximately \$22 per long ton at New York for prime Louisiana sulphur, and at \$22.50 at Boston, Philadelphia, and Baltimore. Quotations on roll sulphur were from \$1.85 to \$2.15 per 100 pounds; for flowers of sulphur the range was from \$2 to \$2.40 per 100 pounds; and for sublimed sulphur it was from \$2.20 to \$2.60 per 100 pounds. Sicilian sulphur was held at the same figure.

In 1911 there were imported for consumption into the United States 29,144 long tons of sulphur, including crude, refined, flowers of sulphur, and other kinds. This sulphur was valued at \$552,836. In 1910 the imports amounted to 30,833 long tons valued at \$558,611. The great bulk of the sulphur imported comes from Japan.

In 1909 the United States exported 37,142 long tons of sulphur, valued at \$736,928; in 1910 the exportation amounted to 30,742 tons, valued at \$552,941; in 1911 the exports totaled 28,103 tons, worth \$545,420.

Production of Pyrite—Sulphuric-Acid Industry.

The production of pyrite in the United States in 1911 amounted to 299,904 long tons, valued at \$1,162,261. This was an increase in quantity of 58,292 long tons and in value of \$184,283, as compared with the production of 1910. The figures are also the maximum ever recorded by the survey for the pyrite industry. Though low-grade sulphide ores of copper containing considerable quantities of pyrite and pyrrhotite and zinc sulphide concentrates have been used in recent years in the manufacture of sulphuric acid, this condition of affairs does not seem to have curtailed the output of pyrite, as it was feared it might. As a matter of fact, the output of pyrite has shown a great increase during the last five years, notwithstanding this was a period of rapid development of the by-product sulphuric-acid industry. It is estimated that the quantity of sulphides other than straight pyrite used in the manufacture of sulphuric acid in 1911 was equivalent to 200,000 long tons of pyrite, which would bring the tonnage of this mineral theoretically produced in 1911 up to nearly 500,000 long tons. This does not include copper-bearing Spanish pyrite used in making sulphuric acid.

The importation of pyrite still greatly exceeds the domestic supply, as appears from the following statement of imports for consumption for the last three years: 1909, 688,843 long tons, value \$2,428,580; 1910, 803,551 tons, value \$2,748,647; 1911, 1,006,310 tons, value \$3,788,803.

For the first time in the history of the volume Mineral Resources, published by the Geological Survey, a brief statistical statement is made of the sulphuric-acid industry. One of the reasons for adding

the subject of sulphuric acid is that, owing to the fact that so large a percentage of the output of sulphur and pyrite is converted into acid for use in the industries, the acid production becomes in a way a check on the statistics of sulphur and pyrite, especially of pyrite, which is practically all used in the acid industry. Another reason for collecting the statistics of sulphuric acid is because it is a commodity so extensively used in the manufacture of other chemicals that it has come to be regarded as a criterion or gauge of the activity of the country in chemical manufactures in general. Sulphuric acid is probably used for a greater variety of purposes in the chemical arts than any other substance.

Varied Uses of Sulphuric Acid—Production.

According to Lunge, the principal applications of sulphuric acid are the following:

1. *In a more or less dilute state (say from 144° Twad. downward).*—For making sulphate of soda (salt cake) and hydrochloric acid, and therefore ultimately for soda ash, bleaching powder, soap, glass, and innumerable other products. Further, for superphosphates and other artificial manures. These two applications probably consume nine-tenths of all the sulphuric acid produced. Further applications are for preparing sulphurous, nitric, phosphoric, hydrofluoric, boric, carbonic, chromic, oxalic, tartaric, citric, acetic, and stearic acids; in preparing phosphorus, iodine, bromine, the sulphates of potassium, ammonium, barium (blanc fixe), calcium (pearl-hardening); especially also for precipitating baryta or lime as sulphates for chemical processes; sulphates of magnesium, aluminum, iron, zinc, copper, mercury (as intermediate stage for calomel and corrosive sublimate); in the metallurgy of copper, cobalt, nickel, platinum, silver; for cleaning (pickling) sheet iron to be tinned or galvanized; for cleaning copper, silver, etc.; for manufacturing potassium bichromate; for working galvanic cells, such as are used in telegraphy, in electroplating, etc.; for manufacturing ordinary ether and the composite ethers; for making or purifying many organic coloring matters, especially in the oxidizing mixture of potassium bichromate and sulphuric acid; for parchment paper; for purifying many mineral oils, and sometimes coal gas; for manufacturing starch, sirup, and sugar; for the saccharification of corn; for neutralizing the alkaline reaction of fermenting liquors, such as molasses; for effervescent drinks; for preparing tallow previous to melting it; for recovering the fatty acids from soapsuds; for destroying vegetable fibers in mixed fabrics; generally, in dyeing, calico printing, tanning, as a chemical reagent in innumerable cases; in medicine against lead poisoning, and in many other cases.

2. *In a concentrated state.*—For manufacturing the fatty acids by distillation; purifying colza oil; for purifying benzine, petroleum, paraffin oil, and other mineral oils; for drying air, especially for laboratory purposes, but also for drying gases for manufacturing processes (for this, weaker acid also can be used); for the production of ice by the rapid evaporation of water in a vacuum; for refining gold and silver, desilvering copper, etc.; for making organosulphonic acids; manufacturing indigo; preparing many nitro compounds and nitric ethers, especially in manufacturing nitroglycerin, pyroxylin, nitrobenzene, picric acid, etc.

3. *As Nordhausen fuming oil of vitriol (anhydride).*—For manufacturing certain organosulphonic acids (in the manufacture of alizarin, eosin, indigo, etc.); for purifying ozokerite; for making shoe blacking; for bringing ordinary concentrated acid up to the highest strength as required in the manufacture of pyroxylin; and for other purposes.

The 1911 production of sulphuric acid in the United States aggregated 2,210,330 short tons, valued at \$17,369,872, as follows: 50° Baumé, 1,026,896 tons, value \$5,447,958; 60° Baumé, 421,165 tons, value \$2,624,042; 66° Baumé, 751,541 tons, value \$9,176,297; other grades, 10,728 tons, value \$121,575.

Consul Thomas E. Heenan reports that the total population of Warsaw, Poland, on January 1, 1912, was 821,369, an increase of 24,276 in 12 months.

GERMAN IMPERIAL UNEARNED-INCREMENT TAX.

[From Consul General A. M. Thackara, Berlin.]

The unearned-increment tax was first assessed on German territory in Kiaochow, China, in 1898. In Germany proper the tax was first levied in 1904 in the city of Frankfort on the Main, and from that date its use so increased that by the 1st of April, 1910, it existed in 457 communities and 13 counties, a large part of which were in Prussia. In April, 1910, a bill was introduced in the Reichstag to enact an unearned-increment-tax law covering the whole Empire. On February 1, 1911, this bill passed with 199 yeas and 93 nays, 20 members not voting.

The new law, which went into effect April 1, 1911, superseded all existing statutes bearing on the taxation of the unearned increment. However, those communities where an unearned-increment tax existed on April 1, 1909, will continue to receive until April 1, 1916, an amount equal to what they have been receiving, on the average, in the preceding years. After that date the cities will receive a small proportion of the imperial tax.

According to the provisions of the law, the tax is at present calculated on the basis of the value of the real estate on January 1, 1885, without reference to prices paid or received prior to that date, unless the owner can prove that he or his predecessor had previously paid a higher price. In taxing the unearned increment after April 1, 1925, unless there has been a transaction which determines the value within the past 40 years, the value of the real estate 40 years before date will be taken as the value on which the tax is to be computed, unless the owner can show that either he or his predecessor has paid a higher price for the real estate at some time more than 40 years previously.

Rate of Taxation.

The rate of taxation varies from 10 to 30 per cent. The highest rate is imposed when the value of the real estate has increased 290 per cent or more and the lowest rate when the increase is less than 10 per cent. The following table gives the rate of taxation:

Increase of value.	Tax on increase.	Increase of value.	Tax on increase.
	<i>Per cent.</i>		<i>Per cent.</i>
Up to 10 per cent.....	10	200 to 210 per cent.....	21
10 to 30 per cent.....	11	210 to 220 per cent.....	22
30 to 50 per cent.....	12	220 to 230 per cent.....	23
50 to 70 per cent.....	13	230 to 240 per cent.....	24
70 to 90 per cent.....	14	240 to 250 per cent.....	25
90 to 110 per cent.....	15	250 to 260 per cent.....	26
110 to 130 per cent.....	16	260 to 270 per cent.....	27
130 to 150 per cent.....	17	270 to 280 per cent.....	28
150 to 170 per cent.....	18	280 to 290 per cent.....	29
170 to 190 per cent.....	19	Over 290 per cent.....	30
190 to 200 per cent.....	20		

The high rates are rarely assessed, as large increases in value occur only after the real estate has been held by the same owner for a long period, whereby, according to paragraph 16 of the law, there is a great reduction on account of long tenure. For every year that comes into consideration in levying the tax $2\frac{1}{2}$ per cent is added to the value of real estate valued up to 100 marks per are (2.21 cents per square foot). When the value is more than 100 marks per are,

2½ per cent is added to that part up to 100 marks, and to the part above this sum 2 per cent is added if the land is not improved and 1½ per cent if improved. As a result of this allowance any real estate whose value is increasing gradually and whose ownership remains unchanged is, in the event of a sale, in part or wholly relieved from paying this tax.

Provision for Reduction of Tax.

In addition to the foregoing far-reaching provision for length of ownership, paragraph 28 of the law provides that the tax be lessened by 1 per cent for every entire year considered in assessing the tax. If the property was acquired before January 1, 1900, the reduction is 1½ per cent a year for the whole period up to January 1, 1911. Commenting upon the law, Dr. W. Boldt, of the city council of Dortmund, says:

By this twofold reduction the extremely large gains which are realized in the large cities as the result of original possession or of acquisition many years ago through speculation are favored entirely too much. While this allowance for an increase of value without taxation, provided for in paragraph 16 of the law, is thoroughly approved of in principle, it seems urgently to be desired that the reduction of the tax provided for in paragraph 28 of the law should be done away with or considerably lessened in the event of the revision of the law. This reduction of the tax, besides favoring the increased values provided for in paragraph 16, benefits particularly the large property holders and real estate which was acquired through speculation many years ago, as well as encouraging the retention of real estate in the large cities for speculative purposes.

Certain transactions are exempted in levying the tax, of which the following are the principal: (1) Inheritances, so far as this would cause double taxation owing to the inheritance-tax law; (2) changes in the tenure of real estate on account of marriage or in certain other family transactions; (3) the exchange of real estate to improve the shape of adjoining property.

In this rapid survey of the law it has not been possible to mention some of the important details involved. "Das Reichszuwachststeuergesetz," by Dr. W. Boldt, contains the law in full, together with commentaries on each paragraph by the author. The cost of the book is 3 marks (75 cents).

UNDEVELOPED BORNEO.

[From Consul Orlando H. Baker, Sandakan, British North Borneo.]

North Borneo is a wild and uncultivated country, without even roads for wagons. A few strips of short roads for carts are found about the seaports, but none to justify the importation of a motor car. Travel about the towns is by jinrikishas, by sedan chairs, or pony carts. Travel into the interior is by rivers; footpaths only connect settlements between rivers. After two or three years, when the rubber estates are developed, there may be roads built and a call for automobiles.

Dutch Borneo obtains supplies from Batavia, Java; Sarawak from Singapore; and North Borneo from Singapore, Hongkong, and Manila. Retail business in Sandakan is carried on mostly by Chinese. Of the two importing firms one is German, the other English.

Those wishing to secure a full account of the resources and business of this island should secure a copy of "Wild Men of Borneo and the Land They Live In," published by Harper & Bros., New York.

FRENCH CONGRESS FOR FOSTERING FOREIGN TRADE.

[From Commercial Agent Archibald J. Wolfe.]

From June 24 to 28 there will be held in Paris a National Congress of the French Domestic, Foreign, and Colonial Chambers of Commerce to consider ways and means for promoting French export trade, removing the handicaps under which it is suffering, and principally for considering the question of organizing facilities for financing foreign business. Official bodies will have the right to send 10 delegates each to the congress.

The French trade has long felt that its share of foreign business is practically limited to products in which there is no foreign competition—that is, products essentially French in character, style, and workmanship—and that in lines in which foreign competition is encountered the French are handicapped, mainly by reason of having no machinery for financing foreign business.

The congress will discuss the following subjects: Improvement in the organization of the foreign commerce of France, long-term credit in foreign trade; development of maritime relations with South America, the Far East, Algeria, Tunis and Morocco, and the west coast of Africa; improvement in ways of communication between Marseille, Bordeaux, Lyon, and Geneva; customs relations between the colonies and the motherland; professional instruction for maintaining the superiority of French products and for training French representatives for foreign commerce; and military service of Frenchmen located abroad.

Preliminary Report—French Discount Bank.

The secretary of the committee on long-term credit has submitted a preliminary report which makes interesting reading for Americans in view of the fact that there are certain features in common between the difficulties of American and French manufacturers in financing foreign shipments. This preliminary report recites the handicaps of the French manufacturer as compared with his British and German competitors in satisfying the demand of the foreign customer for long-term credit. It describes the present insufficient means of the French exporter in drawing on customers abroad and disposing of the bills thus created.

The Bank of France in dealing with foreign bills is limited by its statutes to handling bills drawn for not more than 90 days and provided with three signatures. Being a monetary institution, it is bound to exercise the greatest prudence and will not discount bills excepting for customers whose financial standing is of the very highest. It requires securities which an ordinary exporting manufacturer finds irksome to provide in negotiating foreign bills. The report states that there is danger in negotiating bills through the Paris branches of foreign banks, as this makes possible a leakage of information.

Various attempts have been made to establish a bank for the discount of foreign bills, whose functions would include the encouragement of the French foreign trade by all possible means, the mobilization of long-term credits, the organization of a commercial information service, and the creation of a network of correspondents in foreign countries preparatory to establishing branches abroad. The

death in 1909 of Mr. Siegfried, who was the moving spirit of the enterprise, brought it to a temporary end, but the project was taken up anew in 1910, and a number of independent committees, private and Government aided, worked out plans for such a bank, as well as a draft of a bill to enable the Bank of France to deal with the foreign acceptance business.

Roubaix Textile Trade Bank.

For some time there has been in existence in the city of Roubaix an establishment furnishing the following facilities exclusively for the textile export trade: It discounts 9 months' bills drawn by manufacturers on foreign customers in favor of French manufacturers; it conducts a *del credere* business, being a guaranty of commercial risks abroad; it finances and facilitates selling expeditions in foreign markets by groups of noncompeting manufacturers; it procures reliable permanent representatives abroad. The name of this enterprise is *Comptoir Français d'Exportation*. In organizing a bank for this business the difficulty was encountered of adapting an enterprise with a capital supply at short call to finance operations with long datings.

INCREASED TRADE OF CHINESE PORT.

[From Consul A. A. Williamson, Antung.]

Contrary to expectation, the trade of Antung for the first quarter of the current calendar year was in excess of that for 1911, but it is not yet possible to tell whether this is a real increase or simply a stocking-up movement after the close winter season. The principal articles imported from foreign countries and Chinese ports as shown by the Antung customs records for the first three months of 1911 and 1912 were:

Articles.	1911	1912	Articles.	1911	1912
Breadstuffs:			Cotton goods—Continued:		
Flour.....piculs ¹	11,792	16,799	Yarn, Japanese.....piculs.....		125
Maize.....do.....	140	7,066	Woven, colored.....yards.....		9,422
Rice.....do.....	15,982	5,368	Fish, dried and salt.....piculs.....	535	2,653
Charcoal.....do.....	4,129	1,322	Hides, cow.....do.....	793	3,277
Cigarettes.....mille.....	21,620	6,463	Iron and mild steel.....do.....	181	214
Cotton goods:			Matches.....gross.....		10,200
Blankets, Japanese.....pieces.....		3,842	Milk, condensed.....dozen.....		427
Cloth, Japanese.....yards.....	19,439	108,703	Needles.....mille.....		2,545
Drills, Japanese.....pieces.....		1,354	Oil:		
Flannels, Japanese.....do.....		107	Engine.....gallons.....		1,030
Handkerchiefs.....dozen.....		625	Kerosene, American.....do.....		8,850
Italians.....pieces.....		747	Soap, toilet.....dozen.....		1,790
Jeans, English.....do.....		300	Spirits, malt liquors, etc.:		
Sheetings, Japanese.....do.....	2,720	9,702	Beer and porter.....do.....		400
Shirtings.....do.....		3,268	Sake.....piculs.....	2,104	1,432
T cloth, Japanese.....do.....		102	Sugar.....do.....		2,097
Thread on spools.....gross.....		153	Timber, planks.....sq. ft.....	56,018	
Towels.....dozen.....	2,315	6,212	Umbrellas, cotton.....pieces.....		2,310

¹ Picul=133½ pounds avoirdupois.

Among the chief articles of Chinese produce exported to foreign countries and Chinese ports during the same period of 1912 were: Bean cake, 164 piculs; beans, 1,403 piculs (39 piculs in 1911); samshu, 1,275 piculs (725 piculs in 1911); raw wild silk, 631 piculs (228 piculs in 1911); wild cocoons, 12,568 piculs (4 piculs in 1911); cocoon refuse, 16 piculs; softwood beams, 17,499 pieces (423 in 1911); softwood poles, 2,959 pieces (297 in 1911).

CONSTRUCTION WORK ABROAD.**ITALY.**

[From Consul Chapman Coleman, Rome.]

New Federal Government Buildings.

In addition to largely augmented traffic and other facilities afforded during the past year, generous provision for a greatly augmented embellishment of Rome and the more convenient dispatch of public business has been made by legislative appropriations of large sums for constructing a series of new Government buildings, for the Ministry of the Interior, in the Via Panisperna; for the Ministry of Public Instruction, in the Viale del Re, at the foot of the Janiculum; for the Ministry of Justice, in Via Arenula, near the Garibaldi Bridge; for the Ministry of Marine, on the Lungotevere Arnaldo da Brescia, close to the Margherita Bridge; and for the Corte dei Conti (Court of Accounts), on the site now occupied by the Villa Pallavicini, outside Porta Salaria.

While only the architectural designs of these constructions are yet under consideration, attention is being given by the consulate to this matter, with a view to furthering at the proper time the interests of American trade by calling attention to possible opportunities for participation in furnishing materials and office equipment required in the new constructions.

SERVIA.

[From Consul Maddin Summers, Belgrade.]

General Building Activity.

Belgrade is a modern city of nearly 100,000 inhabitants. Its situation on the Danube is most favorable for American trade, as shipments from any port in the United States can be sent cheaply by all-water route. It is also the distributing center of all products imported for other parts of the Kingdom.

In the last few years the city has made great progress. The financial situation of the country could not be better, and financial obligations are met with scrupulous promptness. On every side handsome, modern, and costly buildings are being erected, some by the Government, some by private individuals. The National Parliament Building is now being completed. Plans are on foot for the erection of other national and municipal buildings, while the number of modern houses being built to meet the exigencies of a prosperous people is very large. The city is now being thoroughly overhauled, and in each street an excellent drainage system is being placed. Large improvements in the construction of harbors and ports is also contemplated, the principal one being the building of the Branovo Port, connecting the Danube therewith by railroad with the Adriatic.

Iron Girders and Building Construction Material.

For all this construction work one of the principal articles, namely, iron girders, come principally from Austria and Germany. The importations are rapidly increasing, amounting in 1911 to 3,000 tons. These girders are sold in Servia according to the rules of the Deutscher Verband (German Steel Trust). They are of normal profiles and in length from 12 to 15 meters; extra widths according to the fixed

extra prices; extra wide girders, system Grey, length 15 meters, width, 10 to 40 centimeters.

The prices at which dealers here closed some time ago ranged from 160 to 165 francs (\$30.88 to \$31.74) per ton c. i. f. Belgrade by water transport from Austrian works. Servian merchants are making purchases of 200 to 600 tons, paying against documents.

The goods could be shipped from the United States via Saloniki, Turkey. It is not advisable to ship them via Fiume or Trieste, as the railway rates from those ports to Belgrade are rather high and would consume the profit.

— AUSTRIA. —

[From Consul General Charles Denby, Vienna; see also Daily Consular and Trade Reports for Sept. 16, 1909, Oct. 3, 1910, and Feb. 23, 1912.]

Waterway Construction in Austria.

The Austrian Government, according to a decision of the Ministers made public on May 29, contemplates increasing the sum to be devoted to waterway construction by applying the further sum of \$7,000,000 to the \$70,000,000 provided in the bill brought before Parliament in December last. The exact disposition of this fund is not yet determined, but it is in general decided to employ it in Bohemia, Lower Austria, and the Alpine sections of the country. In Bohemia there is a demand for new dams and for regulation of the Elbe. There is a conflict of views as to the work to be done in Lower Austria. In the Alpine sections it is proposed to construct aqueducts and drinking-water conduits and to pay for some work already done.

The Austrian Government contemplates spending \$78,155,000 in various ways for canalization, water supply, etc., during the period 1913-1927. It is impossible, however, at this time to state exactly when and where the work will be done or to indicate to American manufacturers how they may offer machinery therefor. It might be advisable for American engineers and contractors to watch the development of the Government's plans through the public press or through local representatives. It is probable that large contracts when given will provide for preference for local contractors, though the specification of foreign machinery will probably be allowed.

— ARGENTINA. —

[From Vice Consul General Albert G. Ebert, Buenos Aires; monetary statements in United States gold.]

New Construction Regulation—Three New Steamers.

Hereafter all contractors will be obliged to put up notices in front of an edifice which is being constructed or repaired, giving the name of the contractor and his address. Failure to do this will be punishable by a fine.

The Argentine Board of Hydraulic Works has been authorized to call for public tenders for providing three steamers, one for passengers and two for cargo, for the navigation of the Rio Bermejo; the cost of the three vessels is estimated at \$70,000 gold.

New Bridges.

The Argentine Minister of Public Works has approved the plan and the estimated cost of \$133,288 of the Board of Bridges and Roads for a bridge for vehicles over the River Guachipas in the road from

La Vina station to Guachipas. The technical office in Europe is to invite tenders for providing the metal part of the bridge, and the board is to prepare the conditions of tenders for the works on the ground.

La Dirección General de Puentes y Caminos (Office of Bridges and Roads), Buenos Aires, has been authorized to draw plans for a draw-bridge to cross the Rio Bermejo on the road from Chaco to Formosa, for which work \$29,722 has been allotted.

Electric-Light Installation.—New Freezing Plants.

The Departamento General de Arquitectura, Buenos Aires, has been authorized to call for tenders for electric-light installation at the Instituto Nacional de Bacteriología. The cost is estimated at \$17,121.

At Rio Santiago, near La Plata, erection has been begun on a new freezing establishment. Another big business of the same nature is projected and building operations are about to be initiated.

New Business Structures.

Gath & Chaves (Ltd.), a large department store in Buenos Aires, announce another issue of preference shares to the extent of £1,000,000 (\$4,866,500) in London. With this new capital the firm will extend its business throughout the continent. A new place of business is soon to be erected in this city.

The Bolsa de Comercio will erect a new building on a site covering 4,000 square varas (about 32,000 square feet).

[From the London Times.]

Bridges for Argentina.

Among the orders for South American railways recently obtained by an English firm (of Thornaby-on-Tees) is one for a bridge of six-deck spans of 20 meters clear to carry the Cancete branch of the Buenos Aires & Pacific Railway over the River San Juan, and four-deck spans of 20 meters clear for single-span bridges over other rivers. The firm recently shipped for the same railway company a four steel-skew span bridge to replace the existing single-track bridge over the Calle San Martin at Mendoza. This bridge is arranged for a double track, and the trough flooring rests on cross girders bearing on three-plate girders at 15 feet 7½ inches centers. The girders rest on built-up steel columns 16 feet high, and the total width of the bridge inside of hand railing is 32 feet 9 inches. For crossing the Calle Coronel Plaza, Mendoza, the same firm recently shipped a bridge consisting of four square spans, the center one being 22 feet 11½ inches center to center of columns, and the end ones 9 feet 10½ inches from center of columns to faces of abutments.

COLOMBIA.

[From Consul Isaac A. Manning, Barranquilla.]

Proposed Public Works and Enterprises at Cali.

At Cali, in western Colombia, a number of public improvements are in contemplation. A company has been formed, at the instigation of the Central Board of Ornamentation, for constructing a theater. The municipal council has also contracted with the electric light company to double the number of public lights supplied, and Cali will, it is said, be the best lighted city of the Republic. This will call for an extension of the electric plant.

The municipal council has also entered into a contract with the railroad company (Ferrocarril del Pacifico) for the preparation of plans for a metal aqueduct, with all reservoirs, etc., for a water service for the city, and also for paving the streets. In case this

work is carried out there will be an opportunity for American manufacturers to supply tubing, cement, grading tools, and perhaps rock crushers and steam rollers.

PANAMA.

[From Consul General Alban G. Snyder, Panama City.]

Construction of New Tramway.

The following notes concerning the building of the new Panama electric line are from the Panama Journal:

The system will consist practically of three lines—one on Central Avenue, one to Balboa, and one on North Avenue to the Sabanas Road and along that road as far as the zone police station, making a total of about 12 miles of track. The Panama Tramways Co. (capital stock, \$750,000) has for its head Minor C. Keith, with C. G. Young, of New York, as consulting engineer. The contractors are R. W. Hebard & Co., and the work must be completed within 14 months from January 23, 1912. Grading work is proceeding and track material is arriving.

MEXICO.

[From Consul Samuel E. Magill, Guadalajara.]

Short Railroad Line from Torreon to Guadalajara.

There is a movement to build a railroad from Torreon to Guadalajara which will shorten the distance between the two cities several hundred kilometers (kilometer=0.62 mile). A glance at the railroad map of Mexico will show the need for it, and that the building of an independent line not only shorter than, but competing with, the National Railways of Mexico—now the only railroad into Guadalajara—will aid greatly in developing the commerce of this the granary of Mexico.

The interests back of this movement do not appear, so it is uncertain whether they are independent of or acting in behalf of the National Railways of Mexico. It may be that the concessions are being sought to be sold to the highest bidder. At any rate Guadalajara needs the competing railroad and hopes to get it.

THE PHILIPPINES.

[From the Manila Free Press.]

Hotel Building—Cog Railway.

Work on the new Iloilo hotel is progressing satisfactorily and it will probably be ready for use in January. The hotel corporation has \$100,000 capital.

It has been determined that an 8-mile cog system will take trains into Baguio on the railroad now being constructed from Aringay. The railroad from Manila to Baguio will be 175 miles long, or 56 miles more than the distance between Manila and Dagupan.

Irrigation Preliminaries.

The Irrigation Council, provided for by an act of the legislature, held its first meeting in May. Besides an agriculturist to be appointed by the governor general, the members are as follows: The Secretary of Commerce and Police, ex officio chairman; the chairman of the committee on agriculture, Philippine Assembly; the Director of Public Works; and the chairman of the committee on public works, Philippine Assembly.

University Buildings—Water Reservoir.

Bids have been opened for the construction of University Hall, the first of the new university buildings at Manila. The lowest bid is that of the Manila Construction

Co., \$102,500, in 300 working days. The building will be erected on Calle Padre Faura, opposite the old exposition buildings.

Superintendent Gideon, of Manila city water department, has recommended that a reservoir of 2,000,000,000 gallons' capacity be constructed on the Montalban watershed higher up than the reservoir now in use and that another reservoir of smaller capacity be built on the Manila side of the Mariquina River to safeguard the city with an adequate supply of water against the longest possible dry season.

CHINA.

[From Consul C. L. L. Williams, Swatow.]

Proposed Railway from Chaochowfu to Hweichowfu.

The consulate in its annual trade review in Daily Consular and Trade Reports for December 22, 1911, reported that a railway line from Chaochowfu, a prefectural city about 25 miles northwest of Swatow and connected with it by rail to Hweichowfu, another prefectural city, about 60 miles northwest of Kowloon (Hongkong), was under discussion. The recent revolutionary activity throughout the Province caused this, together with many other projects, to be temporarily abandoned, but, according to the Canton press (vernacular), the matter is being taken up again. It is reported that at a meeting of Hweichow and Chaochow merchants the following preliminary regulations for the proposed company were accepted:

1. That the name of the company should be the Merchants Hwei-Chao Railway Co. (Ltd.).
2. The length of the line shall be 246 miles (English), which will be divided into four sections as follows: First section, Chichshih Bay to Hweichow; second section, Hweichow to Haifung; third section, Haifung to Puning; fourth section, Puning to Chaochow.
3. The capital shall be \$20,000,000, Mexican (about \$9,100,000), to be divided into 4,000,000 shares.
4. The shares will be of three classes, namely, (a) 30,000 founders' shares, (b) 500,000 preferred shares, (c) balance ordinary shares.

Should this line materialize, it is reasonable to suppose that an extension will be made from Hweichowfu to connect with the railroad line into Canton. The prospects for raising so large a sum as \$9,100,000 locally are not bright at present. So far as I can learn no survey of the route has been made, but there are few, if any, geographical difficulties. Chichshih Bay is on the coast about midway between Swatow and Hongkong. It is not open to trade, but is reported to be a good harbor. There was some talk of fortifying it as a naval base last year.

GERMAN SOUTHWEST AFRICA.

[From Consul W. J. Yerby, Sierra Leone.]

Linking up the Railway Lines.

The African World of April 6, 1912, says:

The north and south of German Southwest Africa have now been connected by the railway from Windhuk to Keetmanshoop. The company laid the last of the sleepers and rails of the north section on February 17, when the south section was also completed. The new line, the first of the Dernburg railway scheme, is regarded as the first great railway in German Southwest Africa built on the Cape gauge. Together with the section Karibib to Windhuk, which has been rebuilt into the Cape gauge, and the Luderitzbucht-Keetmanshoop railway, it forms a complete uninterrupted railway in Cape gauge of some 650 miles.

ENGLISH TRADING IN NEAT-CATTLE HIDES.

[From Consul Benjamin F. Chase, Leeds, England.]

A beginning in the shipment of hides of neat cattle from this consular district to the United States has aroused an interest in the method of procedure in handling hides in this section.

Five concerns sell hides by auction in Leeds, procuring them from the local butchers, classifying and auctioning them once a week. They deduct their commissions and pay the balance to the butchers. The hides are gathered from local butchers and abattoirs by wagons belonging to the sellers or dealers. From outlying districts they are brought in by the individual butchers.

The hides are assorted and classified according to weight and quality. Lists are issued in advance of the auction by the dealers or auctioneers to agents, tanners, and others interested. These lists show the number of hides of each classification and the price prevailing the week previous; they also have columns for the selling price and for the purchaser's name. In event of two or more bidders making the same bid the lot is cast to see who takes them.

The classification of the hides has various ranges: For heifer and ox hides there are six ranges—49 pounds and under, then by 10-pound limits to 90 pounds and upward; cowhides, four ranges—49 pounds and under by same limits to 70 pounds and over; bull hides—first and second classes. A separate and similar classification is made for cut and damaged hides. Calfskins have six ranges—kips, first class, and second class; cut, under 9 pounds, 9 pounds to 16 pounds, 17 pounds and over.

The rules and regulations are the same for all sellers:

(1) The highest bidder to be the purchaser and in case of dispute the lot to be put up again or auctioneer to decide.

(2) The hides to be taken by the purchaser as classed and at weights marked upon them, and to be moved on the day of sale if required.

(3) Payment to be made in cash (before delivery if required), in default of which the goods to be resold, the loss, if any, to be made good by the defaulter. All payments to be made within seven days and no second lot to be delivered until the previous purchase is paid for.

(4) Not to advance less than one-fourth of a cent per pound on hides and calfskins.

The sale of April 26 amounted to 2,427 hides. The price per pound averaged 13 cents for cow, ox, and heifer hides, 9 to 10 cents for bull hides, 16 to 19 cents for calfskins, kips 12 cents. About 10 agents and tanners attend the sales regularly.

ELECTROCUTING ANIMALS IN EUROPE.

[From Consul Louis Goldschmidt, Nantes, France.]

Inquiry is made in regard to the experiments made at the abattoir here in electrocution of animals for slaughter for food. Dr. S. Leduc, who made the experiments, furnishes the following statement:

I have killed by means of electricity a great number of animals—oxen, bulls, cows, and horses, also hogs, calves, sheep, and dogs. The current was of 110 volts, and the intensity of 40 to 80 milliamperes. The current was interrupted 100 times per second, passing each time during one one-thousandth of a second. See on this subject the pamphlet *Le Sommeil électrique*, Masson, editor, 120 Boulevard St. Germain, Paris.

I experimented solely with a view to study of the subject, and that is why I did not continue. The director of the abattoir at Regensburg (Ratisbonne) came to Nantes to study the question, which is followed up, I believe, in Germany.

VENEZUELAN BUSINESS NOTES.

[From Consul Thomas W. Voetter, La Guaira.]

Market Prices of Foreign Goods.

Local prices of various imported commodities now are as follows: Bagging, 13½ cents per yard; drills, 12, 16, 22, 24, and 26 cents per yard, according to quality, 27 inches wide, 40 to 45 yards in the piece; gray shirting, 9, 11, 12, 14, and 16 cents per yard, 25 and 26 inches wide, 40 yards to the piece; checks and plaids, same prices and sizes as the gray shirting; white shirting, 5, 6, 7, 8, 9, 12, 16, and 30 cents per yard, 25 and 26 inches wide, 40 yards and also 75 to 80 yards long; prints, same range of prices as the white shirting, 25 to 27 inches wide, 40 yards to the piece.

One criticism of American goods offered here at times is that they are too heavy in weight. This increases the customs duties, all of which are based on gross weight of packages as imported, and as a consequence the selling price must be raised. Wide goods also will not sell, as the price per running yard must be greater than in the narrower goods and the retail customers will not pay for this extra width. Undershirts, now mostly imported from Spain, sell at \$2 to \$4.50 each.

Prices of chinaware are according to quality. For an ordinary set of plain earthenware dishes the price is \$13.

Coal, Cardiff patent briquets, has been selling at \$12 per ton, but this price will probably be raised in the future. A good quality lump coal might interest purchasers.

Canned butter, not pure, "Delicioso" brand, sells at \$32.50 per 100 pounds. Canned fruits sell at \$10 per dozen cans. Rope sells at \$12 per 100 pounds. Men's straw hats sell at from \$16 to \$30 per dozen. Wire nails sell at \$9.20, galvanized nails at \$12, and barbed wire at \$3.60 per 100 pounds.

Native oak-tanned sole leather can be obtained for less than 30 cents per pound, so that American sole leather can not profitably be imported. Cabritilla (kid) is imported, much of it from the United States, and sells here at 13 cents per square foot for poor to 40 cents for good. Glacé kid is imported from France and sells at 35 to 40 cents per square foot.

Rice is now imported from the Far East via Hamburg or Amsterdam. It is probable that if there were direct steamship communication between New Orleans and this port American rice would find a market here.

Perfumery is much used and all classes are imported.

Paper Trade—American Disadvantages—Steamer Lines.

American wrapping paper is often considered to be too heavy, and a very thin but strong paper is imported from Norway for wrapping purposes. Italian paper is used for ordinary correspondence on account of its light weight and because it has the ruling desired by the customers. Typewriter papers are frequently American. American or Canadian news paper is imported.

One disadvantage American trade is subject to is that neither in this port nor in the largest city, Caracas, are there any American firms engaged in importing dry goods, etc. The largest firms are composed of men from Germany, France, etc., who have close con-

nections in their native lands and consequently buy most of their goods there. They are also engaged in buying and shipping the coffee, cocoa, etc., produced in this country, and by this means are in close touch with the merchants in the smaller towns.

There are two lines of steamers from New York. The Red D Line has weekly sailings and reaches Venezuelan ports in eight or nine days. The Dutch West India Mail is less frequent and slower, but the smaller cities along the coast east of La Guaira can be reached by it.

American Exchange.

Merchants in La Guaira would welcome any improvement in banking arrangements between Venezuela and the United States. Frequently they desire to purchase drafts payable in the United States and at times are not able to do so and are obliged to take drafts on Hamburg instead. At other times, however, the amount of American exchange is sufficient for the necessities of business.

Gasoline Scarce and High Priced.

At present gasoline is selling at about 65 cents per gallon, and it is not always obtainable even at that price, on account of the fact that the passenger steamers running to this port will not carry it. The supply is dependent on the arrival of sailing vessels, which come with other cargo, and it is often many months between the arrival of these schooners. Owing to the uncertainty in the gasoline supply, acetylene seems to be quite popular.

SICK INSURANCE IN NORWAY.

[From Consul B. M. Rasmussen, Bergen.]

The sick-insurance law of Norway was enacted September 18, 1909, and amended April 1, 1911, but did not go into effect until July 1, 1911.

The law embraces all wage earners and public servants over 15 years of age whose yearly earnings do not exceed \$322 if in the rural districts, or \$375 in the cities. The law also provides that the employer shall pay a certain percentage (one-sixth) of the premium, while he is held responsible for the whole, but may deduct from the wages of the insured, at the end of term for which premium is paid, the amount thus advanced. Theoretically it is self-insurance on the contributive plan, while actually it amounts to an extra tax upon the employer, as most employees stipulate when engaging their services that the insurance premium shall be paid in addition to the wages.

The first semiannual report of the committee on invalid insurance for the city of Bergen, just issued, is interesting but not satisfactory, and failed to meet the expectations of the advocates of the law. Instead of an expected surplus, as budgeted, the first six months' operation of the law created a deficit of \$2,270. The committee points out as the main causes for such deficit (1) that the insured seek medical aid for most trivial cases and more frequently than the uninsured, and (2) that applications for sick benefits have increased to an alarming extent.

[An article dealing with the Norwegian system of old-age pensions was published in Daily Consular and Trade Reports on Nov. 25, 1911.]

HAND EMBROIDERY IN GERMANY.

[From Consul General Frank B. Dillingham, Coburg.]

Between six and seven thousand women and girls are engaged in Upper Franconia in making hand embroidery, mostly in those towns where home spinning is carried on. In many cases it is the wives and children of the weavers who do the embroidering. The amount earned is a very important addition to the main source of income, especially when business is bad in the hand-spinning industry.

As a rule, embroidering is pursued only as an occupation subsidiary to the main employment, although 2,000 women and girls earn their living entirely thereby. In many cases those engaged in this industry are, first, women of the so-called better class in the smaller towns, who are enabled to earn a little additional pocket money; second, women who can not work in a factory because of their household duties; third, girls who are not set to work in a factory by their parents.

White and colored "plattstich," or plain embroidery stitch, and "ajour" embroidery, as well as "wickelajour" embroidery on table linen, underclothing, etc., are made in the finest qualities.

Large quantities of the finest work are exported to foreign countries, little remaining in Germany because the home market prefers many of the cheap articles made in Teneriffe, which can be placed on the German market exceptionally cheap owing to the low rate of duty on these articles and the small wages paid in Teneriffe. A good embroidery worker in Upper Franconia is able to earn 50 to 75 cents or even more a day.

Much larger sales of embroidery could be made if the embroidery makers were taught new "stickarten," or embroidery stitches, which are now either unknown or little used here. Endeavors are being made to induce the Government to pay the women a small weekly wage out of the State treasury during the time they are learning the new stitches.

ITALIAN TRADE IN GUT STRINGS.

[From Consul General James A. Smith, Genoa.]

Gut strings are manufactured in Italy, some of cheap quality; those of good quality are made at Rome and Naples in southern Italy, and at Verona and Treviso in northern Italy. Although gut strings are imported into this country, the exports far exceed the imports. In 1911 Italy exported 3,874 pounds of gut strings for musical instruments, at a total value of \$40,692, while 977 pounds, valued at \$5,130, were imported.

Several firms in Genoa make gut strings on a small scale, mostly for surgical use, the work being carried on in private houses. The quality of these is said to be inferior to that used for musical instruments. One large manufacturer of gut strings, of Verona, who exports, sells to dealers in Italy at \$0.58 to \$2.90 for each bundle of 30 strings. The length of gut strings in the market here is about 5 feet, or about two lengths of a violin.

The centers of manufacture of musical instruments in Italy are Bologna, Catania, Cremona, Florence, Milan, Modena, Naples, and Rome.

There is but one tennis club in Genoa, and the use of gut for tennis rackets in this city is very limited.

FAR EASTERN NOTES.

[From London and China Telegraph.]

Motor cars are very popular in Sumatra, and on the east coast it is estimated that taking the European population, there is a car to every nine persons.

Japanese coal.—The recent coal miners' strike in the United Kingdom helped Japanese coal to extend its market from Singapore to Colombo. Once Fushun coal has obtained a foothold in the new field, it is unlikely that it will be ousted therefrom completely.

Light railway.—A correspondent informs the Siam Observer that the Siam Forest Co. is building a new light railway at its headquarters upcountry. The line will run some 25 miles from the river bank to the forest, and it is expected to prove of great value in getting logs away rapidly.

Shipbuilding in Japan.—The Kawasaki Dockyard Co. is pressed with more orders than can be executed, and has under consideration the increasing of its capital from \$5,000,000 to \$10,000,000. The company proposes to establish a shipbuilding yard on the seacoast between Naruo and Imazu with the increased capital.

Tramway construction.—Arrangements have been completed in Shanghai for through tramways between the International Settlement and the French Concession. The French and International systems are to be linked at the Bund and South Chekiang Road Bridges, the council having consented to the arrangement. At the latter bridge the necessary alterations will be put in hand at once, and the junction at the Bund Bridge will be made as soon as the new structure is completed.

Shipbuilding in Hongkong.—The Asiatic Petroleum Co. has placed with Hongkong shipbuilders an order for a twin-screw steel motor house boat for service at Haiphong. The new vessel will be 61 feet over all by 21 feet 6 inches beam. There have just been shipped from Hongkong to Vancouver, per *Bellerophon*, two motor boats of 28 feet each, two of 25 feet, and one of 40 feet in length, and the same builders have nearing completion two vessels of 60 feet, one of 50 feet, and one of 45 feet in length, all nine vessels being to the order of James B. Wood, of Vancouver.

Chinese students are beginning to return to Japan for educational purposes. There were at one time as many as 8,000 of these students in Tokyo, but a few years ago a question connected with their supervision created so much dissatisfaction that a large number of them left Japan altogether. Thereafter this exodus was still further increased by a proclamation of the authorities in Peking to the effect that to proceed to Japan for purposes of elementary education was superfluous, as such education could be obtained very well in China, and finishing education alone should be sought in Japan. Now that order has been restored, Chinese youths are beginning to make their appearance again in the Japanese capital.

The tea trade season has commenced, and the Chugai Shogyo has an article by its correspondent at Shizuoka. The total export of tea from Japan is about 42,000,000 pounds per year, and the greater part of the trade, 77 per cent, is in the hands of foreign merchants. There are only two Japanese firms of any importance engaged in the business. Unless the principal one, the Fuji Goshia Kaisha, is able to extend its operations, no other interest will remain to the Japanese houses except the refining of the leaf. The most important factory is that of Messrs. Hellyer, whose new building is reported to be the largest and most perfectly equipped in the Orient. The most noticeable feature of the Japanese tea trade has been the gradual concentration of the trade in Shizuoka, to the detriment of Kobe and Yokkaichi, while the only native Yokohama company has given up business altogether. Although the Japanese engaged in the direct trade with America have been men with plenty of funds and of high spirit they have been quite unable to make the business pay. It was their ambition, remarks the article, to swallow up the American tea trade, but the only result has been the collapse of one firm after another.

Cotton Crop of Guerrero.

Consul Clement S. Edwards, of Acapulco, writes that the cotton crop of the Mexican State of Guerrero during 1911 was 3,300,000 kilos, or the approximate equivalent of 3,630 short tons. From this there were secured 2,220 metric tons of cotton seed and 1,100 metric tons of cotton, the latter equaling approximately 4,840 standard American bales.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9064. Novelties of various kinds.**—An American consul in Mexico reports that a business firm in his district wants advertising matter, price lists, etc., of novelties of all kinds made in the United States. Articles are desired that would be suitable for sale by mail order, the weight limit of any article being 11½ pounds.
- No. 9065. Store and sample room for American goods.**—A business man is fitting up a store and sample room in the center of a European city which he will use exclusively to exhibit American products, thus enabling jobbers and dealers to more fully investigate the merits of American goods and serve as an intermediary between the manufacturers in the United States and the local buyers. The business will be managed by this man personally, and he states that he has room for every class of merchandise and would be pleased to communicate with any manufacturer wishing to do business in the country in question. An American consul writes that this is an opportunity that should appeal to any firms already doing business or that would like to establish connections in that country, as this merchant lived for many years in the United States and is thoroughly familiar with conditions in both countries. There will also be a special room for catalogues, price lists, plans, and specifications.
- No. 9066. Shirts, overalls, and ready-made clothing.**—An American consul in a prosperous British colony reports an opening for the sale of a full line of shirts (especially negligee), overalls, children's ready-made clothing, etc. Correspondence giving full details should be in English, and should be sent direct to a firm named in the report.
- No. 9067. Hardware specialties.**—A business man called upon an American consular officer in Canada and requested that he be put in touch with American manufacturers of hardware specialties, metal devices, etc., who desire representation in a certain foreign country. He believes there is a good market for these articles and that he can handle them satisfactorily. He furnishes references and states he would be glad to hear from American firms as soon as possible.
- No. 9068. Five and ten cent goods for variety stores.**—An American consul in the West Indies has been consulted by a member of a new firm about to begin business in a flourishing town with regard to goods for a variety store, with a special department for the usual line of articles sold in 5 and 10 cent stores in the United States. Correspondence in English is solicited.
- No. 9069. Forms for Egyptian Government tenders.**—The American consulate at Alexandria, Egypt, has forwarded an article outlining the manner to be followed by contractors desiring to submit tenders for Egyptian Government work of all kinds and for all administrations. Blank sheets of official Government paper upon which such tenders must be made were also forwarded. Any American firms desiring to submit bids for supplies or works of any kind can secure these blank forms from the Bureau of Manufactures.
- No. 9060. Construction work.**—A company recently organized in a foreign country has taken a contract to build 18 stations, including passenger stations, freight sheds, tool houses, ice houses, and sleeping apartments for employees of a railway company; the stations are to be built with concrete cellars and foundations and wooden superstructures. The amount of the contract is estimated at \$150,000. Three coal trestles will also probably be built by this firm. Letters offering material should be sent direct to the company.
- No. 9061. Railway construction.**—An American consul in Canada reports that a local man has been awarded a contract for the construction of 35 miles of railroad to connect certain coal mines. Work will commence at once and will cost approximately \$35,000 per mile. Another 14-mile railroad, subsidized to the amount of \$25,000 per mile, will be built at once. Offers to supply machinery, material, or supplies should be sent to persons named in the report.
- No. 9062. Fire float.**—Tenders will be opened on July 7 at the offices of the "Junta de Obras del Puerto de Huelva, Calle Vazquez Lopez 14," Huelva, Spain, for a floating fire extinguisher. Tenders must be accompanied by a 5 per cent deposit, and local representation is necessary.

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FOREIGN MARKETS FOR CHILDREN'S PLAY CLOTHES.

[From Consul Augustus E. Ingram, Bradford, England.]

English Measurements Should be Followed.

In any attempt by American exporters to enter foreign markets through the medium of American consular offices, sending a sample whenever practicable is an excellent plan and in certain cases is likely to be much more advantageous than mere descriptive catalogues and price lists, as the trade can see and examine the article under consideration.

A sample American romper was exhibited to a number of the leading retail establishments in Bradford, and general satisfaction was expressed in regard to the quality and finish of the article. The price was also stated to compare favorably with similar English-made goods. It was suggested that it would be of advantage if the garments were cut to English measurements, as the leg portion of the romper was shorter than is customary here. Some $2\frac{1}{2}$ or 3 inches added to the length would be more acceptable to the buying public and improve the prospects of sale. I mention this point as it was stated in conversation with a retailer that another European nation a few years ago, after having worked up a fair trade in other lines, was pressed to adopt English measurements. It failed, however, to appreciate the necessity for this, with the result that the demand for the articles gradually dwindled away. In this connection I was also informed that American woolen "pantalets" for children have been found too short in the waist to suit entirely the trade in this country.

A further advantage would accrue to American exporters if they gave quotations in English currency and delivered at some port in this country. The nearest for the Bradford district is Liverpool. This would prove an inducement to firms to consider such goods when they would not do so if they had to ascertain the freight, etc., reduce the currency, and make the calculations themselves, as the facilities for having their requirements met in a much easier way in this country are very numerous.

[From Consul James E. Dunning, Havre, France.]

No Present Trade, but a Possible Future Opening.

An American sample romper was submitted to the Havre customs authorities, who state that, although it is quite impossible to fix the exact rate of duty to be paid, this varying according to the weight of the material used, the rate could not in any case be less than 412 francs (\$79.52), nor greater than 668 francs (\$128.92) per 100 kilos (220.46 pounds). I may add that the customs authorities inform the consulate that no garments of this kind are imported into France, the extremely high duty being an insurmountable obstacle.

In any event no large trade could be expected in France, even with a favorable tariff, without a relatively large expenditure for advertising and exploitation. French children do not dress as do American children, even at the seashore. Their attire is fully as formal as that of adults, and there is practically no knowledge of juvenile utility garments. It is, however, a common habit in France for every family of any position whatever to go into the country or to the seashore, and I have observed in the last year or two a decided tendency to change and simplify children's costumes under the influence of the large numbers of English children who are annually brought to France and other countries of the Continent. I consider the tendency well started, and believe that within two or three years there will be a considerable demand for such goods as American play suits.

The American exporter would encounter competition from French manufacturers, who, while they do not make rompers, are already turning out such aprons, waterproof waders, and other similar goods as are called for by French style, and could probably supply any domestic demand which foreign efforts might create. All such articles, and practically every other article sold in France, must be placed with the trade through traveling men operating from Paris, which is the commercial center of the country and from which every part of the Republic can be reached overnight.

[From Consul P. Emerson Taylor, Stavanger, Norway.]

Material Must be Suited to the Climate.

The market in the Stavanger district is chiefly for children's play clothes of part cotton, costing 55 to 80 cents, although in the winter season there is also quite a demand for all-wool suits costing about \$1.90. In men's clothing, both tailored and ready to wear, nothing is sold but all-wool goods, but in small children's play clothes a large quantity of the cotton and part cotton goods finds a ready market.

Owing to the great amount of rain in Norway, there is a heavy demand here throughout the year for children's rubber coats and all-rubber suits. Practically all the school children of all ages wear rubber coats, and in cloth garments for children there is a decided preference for those best adapted to stand much rain. This applies to both play clothes and school clothes, for here, especially among the poorer classes, the same clothes answer for both purposes. This is true also because the children, even of 2 years of age and upward, play much more out of doors than in the United States. The rains are light, though constant, and the climate in winter mild; and the streets and playgrounds throughout practically the whole year are filled with playing children. They are, of course, dressed with warm, heavy, woolen underwear, for woolen underwear is worn universally here winter and summer because of the damp, chilly climate.

[From Consul B. M. Rasmussen, Bergen, Norway.]

Most Play Clothes Made at Home.

About a year ago a local concern was persuaded to give a trial order to an American house for men's jackets and overalls, and now the Bergen firm informs me that it has succeeded in establishing a good trade in this line. For overalls especially there is quite a demand, mostly from fishermen, sailors, street laborers, and in fact from all classes performing rough labor.

With children's play clothes it is somewhat different, as these are generally made at home, the better classes employing sewing women by the day or week, while with the poorer classes this work is generally performed by some member of the family. It is not at all improbable that such goods might find a ready market here, but it is absolutely essential that they be cheap, serviceable, and suited to damp weather, as the great majority of customers will most likely be limited to the middle and poorer classes.

[From Consul Robert Frazer, Jr., Valencia, Spain.]

Outlook Not Promising at Valencia.

I do not feel very optimistic as to the opening for ready-made children's play clothes in the Valencia district. In the first place is the tariff, which to protect the textile industry of Catalonia is very high on even plain piece goods, while made-up clothing of any sort is subject to the duty on the material of which composed plus a surcharge of 150 per cent. This, with freight, etc., would almost certainly result, it seems to me, in making American products expensive in comparison with similar garments now customarily made in every home here from cheap native Catalan materials. In a country where, for example, factory wages paid women for an 11-hour day range from 14 to 27 cents, a difference of even a very few cents in the cost of a child's garment is not an unimportant consideration and is one in which 95 per cent of Spanish mothers would take a good deal of personal trouble to economize.

Local dealers state that the garments universally used here corresponding to American play clothes are full-length blouses, or smock frocks, generally made from serviceable Mayorquin cloth, costing at retail 10 to 25 cents per meter (meter = 1.09 yards). Such blouses are generally fashioned at home, but are also on sale ready-made at 18 to 30 cents each.

As to marketing American products in Spain, most exporters have found it to their advantage to give a general agency to some large distributing house in Barcelona or Madrid and allow it to deal with subagencies and retailers in other cities. This system has the advantages of greater financial security from bad debts and of meeting competitors with their own methods. That is to say, the small Spanish merchant is accustomed to being approached personally, and Spain is full of traveling salesmen representing Belgian, German, French, and English firms, as well as Spanish importers at Barcelona, which is the commercial center of this country. Therefore the next best plan, in my opinion, to sending out salesmen from the United States is to give a general agency as outlined above, and profit by the already established channels organized by the Barcelona distributing houses referred to. There is very little direct importing of manufactured American products at Valencia, and practically no wholesaling or jobbing in any line of business.

[From Consul José de Olivares, Madras, India.]

American Prices Too High for the Indian Consumer.

Some of the leading importers and dealers in ready-made apparel at Madras have expressed the opinion that, while there is a demand hereabouts for children's play clothes, American prices are not sufficiently low to render the introduction of these goods practicable. The dealers inform me that rompers of like style and quality could be made in England to sell at wholesale at not to exceed \$3 per dozen, and here in India they could be copied at even a lower price. The fact is that in southern India the labor and materials that would be employed in such apparel are so cheap that the prospects for marketing foreign goods would seem to be unfavorable.

[From Consul Henry D. Baker, Hobart, Tasmania.]

American Styles Not the Same as Tasmanian.

American-made rompers are reported as unsuitable for the Tasmanian trade on account of the style being different from what is worn here, all girls' garments being made with skirt and blouse, none of the pajama effects being in vogue. For boys from 2 to 6 years the most popular styles are in knitted suits with vest and pajamas in one, and this is sometimes adopted for girls, the skirt taking the place of the pajamas. Girls' garments are generally made fairly high in the neck, with three-quarter sleeves for summer wear and full length for winter, materials of various weights being used.

[From Consul B. S. Rairden, Batavia, Java.]

Light Cotton Materials for Java.

Play clothes for children in Java are made from the cheapest cotton cloths, and it is very doubtful if a suit of such clothes (generally made for little children in combination style) costs more than 50 cents. Further, such garments for children in this tropical country must be made of very light stuff.

There are no dealers in the Batavia district who handle this line of apparel, such clothes being made either at home or by charitable institutions. The poor schools under religious societies turn out such clothes at very low prices.

[From Consul Thomas W. Voetter, La Guaira, Venezuela.]

Customs Duties Prohibitory.

Owing to the high customs duties on made clothing it appears that American firms can not export such articles satisfactorily to Venezuela. The duties alone on such articles would amount to either \$137.05 or \$274.10 United States currency per 100 pounds, the weight of the case being included. It has been estimated that children's play suits can be made here for 60 cents each. Counting in freight and duties, the imported garments would cost more than they could be produced here for and leave no profit for the importer.

Vice Consul James Fisher, of Hull, England, has furnished an abstract of the plan submitted by the Humber Conservancy Board for the improvement of the Humber River. It involves the expenditure of \$1,593,292, most of which is for half-tide training walls.

INCREASED HOP ACREAGE IN THE UNITED STATES.

Following the great world scarcity of hops as a result of the unusually small foreign crop in 1911, the hop growers of the Pacific coast have shown a tendency to greatly increase the acreage devoted to hop production. Whether this actually has resulted in increased planting is as yet uncertain, the estimates placing the additional area devoted to hop growing in Washington, Oregon, and California at anywhere from 5,300 to 18,000 acres. The latter figure is likely too large. Two correspondents of the Department of Agriculture place the increase at about the former figure, while press reports give the higher figure. It is said that a large number of people on the Pacific coast who planned to plant hops this year did not do so on account of the high cost of roots and the difficulty of obtaining wire, poles, and other supplies.

According to the United States Census, the area planted to hops in New York State was 27,532 acres in 1899 and 12,023 acres in 1909. In Washington the figures for the same years were 5,296 and 2,433, respectively. In Oregon the acreage increased from 15,433 in 1899 to 21,770 in 1909, and in California from 6,890 to 8,391 in the same period. In Austria-Hungary the area devoted to hop raising has fallen from 65,502 acres in 1908 to 51,919 acres in 1911; in Germany it dropped from 88,585 acres to 65,845 acres in the same time, and in England from 38,921 acres to 33,056 acres. The yield per acre has also declined in those countries.

American growers of hops are finding an increasing foreign demand, the exports for the past three calendar years having been as follows:

Year.	Pounds.	Value.	Average per pound.
1909.....	8,955,553	\$1,421,000	\$0.16
1910.....	12,748,617	2,306,795	.18
1911.....	14,104,404	4,258,431	.30

True, back in 1907 the exports were 16,090,959 pounds, but they realized only \$2,862,845, or 17 cents per pound, and exports in 1908 were 21,423,869 pounds, valued at \$2,455,410, or 11 cents per pound. The American Brewers' Review of June 1, 1912, gives the following recent quotations at Chicago: New York hops, 30 to 48 cents; Oregon, 40 to 45 cents; California, 38 to 41 cents; Bohemian, 80 to 90 cents. The American hop quotations in cents, given in the New York Journal of Commerce for June 13, 1912, were as follows: States, 1911, 30 to 45; Pacific, 1911, 40 to 44.

LOWER CABLE RATES FROM PERU.

[From Consul General W. Henry Robertson, Callao.]

The Central & South American Telegraph Co. and the West Coast of America Telegraph Co. (Ltd.), the only two companies in Peru having foreign cable services, have made material reductions in some of their rates, in effect from May 1, 1912. The cost per word to the United States, Canada, Germany, Belgium, France, Great Britain, and Holland is reduced from 1.80 soles (\$0.87) to 1.40 soles (\$0.68), and to Italy from 1.90 soles (\$0.92) to 1.50 soles (\$0.72).

USE OF FOUNDRY OIL.

[From Consul General Frank H. Mason, Paris, France.]

The Several French Casting Formulas.

An expert metallurgical engineer has furnished this consulate with the following information concerning the use of foundry oil:

For casting aluminum.—In principle, founders avoid the use of glutinous substances in order to preserve the utmost porosity of the sand molds, for which they use a suitable mixture of siliceous and argillaceous sands. But for the cores of complicated molds they use for each 100 kilos (kilo=2.2 pounds) of sand any one of the following substances: From 1 to 3 kilos of dextrine, whale oil, or resinous gum.

For cast steel, malleable.—There is employed for molds a clean "poor" sand, with which is mixed 5 to 10 per cent "glutin" or vegetable glue (gliadine). For making malleable steel castings there is also employed clean highly siliceous sea sand, mixed with 2 to 5 per cent glucose.

For cast iron.—With a sand maigre (green sand) there is mixed for making cores 2 to 5 per cent of a mixture of equal quantities of linseed oil and dextrine, or linseed oil and molasses.

For casting bronze.—For this there are various methods, but the mixture employed for molds by the leading bronze founders of Paris is 60 per cent new sand, 40 per cent old sand, 8 ounces of linseed oil. Some founders use the same combination of old and new sand, but instead of linseed oil they add 2 to 5 per cent of a special product known in France as "agglutinal," the exact composition of which I am unable to give, but it contains principally glutin or gliadine.

As to quantities used, it is only possible to ascertain that a foundry of average capacity in this country would use from 1 to 1½ tons of core oil, or the substances above given, the average proportion used being 3½ pounds of fixative to 100 pounds of sand.

[From Consul General Frank D. Hill, Frankfort on the Main, Germany.]

Large German Consumption of Linseed Oil in Foundries.

Foundries here use ordinary oils in conjunction with sand in making cores for coarser castings. For fine work, however, best linseed oil is used. It is impossible to give any figures relative to amount of oil consumed by foundries, although this office is advised that consumption of linseed oil is very large.

Linseed oil used here by foundries comes largely from Holland and is bought by foundries from local importers. According to official customs statistics, Germany imported, in 1911, 2,865 tons of linseed oil, valued at \$456,000, of which 2,420 tons came from Holland and the balance chiefly from Great Britain.

[From Consul George Eugene Eager, Barmen, Germany.]

Compound Used by Large German Concern.

Nearly all of the largest iron and steel works of Germany are located in this consular district. In answer to an inquiry as to what proportion of core oil was used at its foundry, one of the largest firms states:

For each ton of sand 10 liters (liter = 1.05 quarts), of celin and one-half kilo (1.1 pounds) of leinol are used.

Dusseldorf and Dortmund, in Westphalia, are the centers for supplies in the mining and steel industries of this section, and there would probably be a good market for American foundry oils providing they are better in quality, cheaper, or have any special improvement over other oils for the same purpose.

[Lists of these iron and steel works as well as importers of foundry oil in Germany and other countries may be had from the Bureau of Manufactures at Washington.]

[From Consul Alfred W. Donegan, Magdeburg, Germany.]

Regarding foundry or core oil, no special brand of prepared oil is apparently used by the foundries in this part of Germany in conjunction with sand in the manufacture of cores. Mixtures are generally made by each foundry to suit its individual purposes.

One local German concern, employing about 1,200 men and making hollow castings for use in its regular product, uses a mixture containing, among other ingredients, beet sugar, molasses, linseed oil, and soya-bean oil. The mixture is made at the works, at a cost of about 50 cents per gallon. An average of about 60 gallons per day is consumed.

COTTON PRODUCTION IN EAST AFRICA.

[Compiled from press report by Consul Alexander W. Weddell, Zanzibar.]

The production of cotton in both German and British East Africa is increasing rapidly, and the outlook for the future continues to be decidedly encouraging. In the British colony the value of the cotton exported during the calendar year 1911 amounted to \$1,335,708, as compared with \$927,348 the previous year. The figures of production in German East Africa are even more encouraging. The table below follows a review of cotton production recently given out by the local representative of the Colonial Agricultural Committee.

District.	Year ending Sept. 30, 1910.	Year ending Sept. 30, 1911.	District.	Year ending Sept. 30, 1910.	Year ending Sept. 30, 1911.
	<i>Pounds.</i>	<i>Pounds.</i>		<i>Pounds.</i>	<i>Pounds.</i>
Tanga.....	154,427	234,159	Mikindani.....	431	11,719
Sadani.....	161,255	248,126	Moschi.....	39,006	80,411
Bagamoyo.....	308	302	Muanza.....	89,542	224,678
Dar-es-Salaam.....	283,069	537,697	Bukoba.....	1,021	1,235
Kilwa.....	209,013	491,536			
Lindi.....	125,950	144,103	Total.....	1,064,022	1,973,966

The figures for 1911, it will be seen, represent an increase of 909,944 pounds, or 84.5 per cent. It is estimated that the crop for this season will be 5,000 to 5,500 bales of 500 pounds each.

ANOTHER PERUVIAN VESSEL.

[From Consul General W. Henry Robertson, Callao.]

Referring to previous reports on the arrivals here of the new steamships *Mantaro*, *Urubamba*, and *Pachitea*, of the Compañía Peruana de Vapores y Dique del Callao, the recent arrival at Callao of the company's new steamship *Huallaga* is noted. It was constructed at Rouen, France, and is destined for fast-mail, passenger, and cargo service between Peruvian ports and Panama. It has a gross displacement of 2,495 registered tons, its speed is 16 knots an hour, and it possesses all of the characteristics and appearance of its sister steamships.

AMERICAN LINE TO THE LEVANT.

[Constantinople dispatch in New York Times.]

The American Levant Line has been organized here to carry on a direct passenger and freight service between America, Egypt, and the Black Sea. It will have a fleet of four steamers, the first of which will sail in July.

THE JERKED-BEEF INDUSTRY IN URUGUAY.

[From Consul Frederic W. Gading, Montevideo, supplementing reports published June 27, 1911, and Mar. 16, 1912.]

The tasajo exported from Montevideo to Cuba during the past four years aggregated in United States gold \$1,499,953 in 1908, \$1,588,175 in 1909, \$860,864 in 1910, and \$1,939,370 in 1911. The exports during the first quarter of 1912 exceeded by 1,634 tons and by \$478,609 those for the corresponding period of 1911, the prices in January being \$99.53 per ton and in December, 1911, \$169.42 per ton. This shows not only a distinct increase in the quantity of tasajo shipped from Montevideo to Cuba, but a considerable advance in values as well, the data being supplied by the Cuban consul in Montevideo.

While an improvement in the tasajo business with Cuba is evident, with Brazil the reverse obtains, due principally to the large increase in customs duty imposed by Brazil on that product in 1905. This has caused a general exodus of the saladeros; in 1897 there were 25 operating in Argentina, there are now 2; until three years ago there were 28 in operation in Uruguay, now there are 5, while to-day Rio Grande, Brazil, has 42. The cost of production of tasajo in Brazil is \$108.10 per ton, in Uruguay it is \$72.75 per ton. It seems strange that while Uruguayan tasajo has formed 70 per cent of the Brazilians' food, it is not used in Uruguay.

Importance of Local Meat Industries.

Of the cattle killed in this region during the last five years 42.73 per cent was utilized in the local industries, of which 82.91 per cent was made into tasajo and 17.09 per cent conserved, as shown in the following table:

Years.	Total number killed.	Uruguay.	
		Tasajo.	Conserved.
1906-7.....	1,609,200	742,000	112,500
1907-8.....	1,426,800	651,800	92,200
1908-9.....	1,664,000	480,200	109,800
1909-10.....	1,881,000	584,000	179,200
1910-11.....	1,651,200	491,000	107,000

A serious feature now threatening the industry is the increase in the number of cows slaughtered, greatly diminishing the breeding capacity of the herds.

Suggested Remedial Measures.

One thoroughly familiar with the industry in all its branches recommends the following as a means of preserving it:

1. Organize a saladero union in Uruguay on a proper basis.
2. Abolish the consigning of products.
3. Improve the quality of the meat.
4. Permanent deposits should be established in foreign markets.
5. Such deposits to be in charge of active, responsible men.
6. Make no direct sales to intermediate markets.
7. The main deposit in Brazil should be located in Rio Janeiro, under which all other deposits should be operated, subdeposits to supply markets near at hand.

Various influences are operating to destroy this industry in Uruguay, some of which have been indicated. Another is the indirect manner of selling, one manufacturer stating he had been in the business more than 25 years, yet had never known anything of his consignees

other than their signatures. Uruguay supplies the raw materials which are elaborated on the frontier and sent inland by rail, as it is cheaper than by sea, escaping the duties which would double the prices if shipped via Montevideo.

SUBSTITUTES FOR COAL IN UNITED KINGDOM.

[From Consul General John L. Griffiths, London.]

Since the British coal strike in the early part of this year many of the large users of coal, including the railways, steamship companies, and municipal corporations have been considering more seriously than ever before the adoption of a substitute fuel. There has been an unprecedented demand for oil engines to replace or supplement steam engines. It is stated that the British towns of Barking, Reigate, Leatherhead, Fareham, Bude, Letchworth, Aldershot, Cosham, Chichester, Aberystwyth, Birmingham, Bath, Swadlincote, St. Albans, Leek, Hindhead, Rothesay, Oxford, Wakefield, Saltburn, Sheerness, Guildford, Bangor, Bridgewater, and Liverpool will soon be partially or wholly independent of coal for their electrical supply.

Many municipal waterworks are also being made independent of coal and steam power. It is claimed by motor makers that many English firms are, as a result of the late strike, seriously considering the advantages of motor transport. Commercial travelers are using motor cycles in increasing numbers when calling upon their customers, as they can travel, it is stated, a hundred miles upon a gallon of petrol (gasoline) and carry their samples, unless they are of great bulk, be entirely independent of the railways, and be able to call upon a greater number of people than they possibly could if restricted to steam travel.

SODA, LIME, AND SULPHUR OF MEXICO.

[From Vice Consul General Claude E. Guyant, Mexico City.]

Information is sought concerning the lime, sulphate of soda, and sulphur deposits in Mexico. I have been able to get information of but one deposit of sulphate of soda, which is in Salinas de El Lucero, district of Bravos, State of Chihuahua.

The mountain chain running along the eastern part of Mexico is, to a greater or less extent, composed of limestone rock, but the purest deposits are in the State of Hidalgo. There are lime works at Apasco, at Tula, and at Tolteca, all in the State of Hidalgo.

The sulphur mines of Mexico were described in Daily Consular and Trade Reports for January 23, 1912. A list of the sulphur deposits in the Republic has been secured from the Geological Institute of Mexico [copy of which may be secured from the Bureau of Manufactures at Washington].

CANADIAN STEEL-MAKING ENTERPRISE.

[Press dispatch from Toronto.]

In order to overcome losses incidental to the termination of the Government bounties, the Dominion Steel Co. has expended a large amount in equipping wire-nail, bolt, and nut mills, which will transform the output from the wire-rod mill into products which enjoy protection under the tariff. This substitution of protected products for unprotected wire rods promises greatly to increase the company's profits henceforth.

VENEZUELAN INDUSTRIAL NOTES.

[From Consul Thomas W. Voetter, La Guaira.]

Concessions for Sugar Central, Gypsum Factory, and Electric Plant.

Various Venezuelan concessions for establishing sugar centrals have been transferred, with Government approval, to Pedro José Rojas, of Maracaibo. It is planned to manufacture refined sugar, and the concessions provide for exemption from customs duty on all machinery, etc., for equipment.

A contract has been signed between Eusebio Chellini, of Caracas, and the Minister of Fomento, for establishing a factory for making calcined gypsum or plaster of Paris. Señor Chellini is to have exclusive right to operate a factory in the Federal District for 5 years, with 3 years' extension; to import free of duty the machinery, viz, ovens, triturating mill, grinding mill, wire-screen cloth, a bolter with its pulleys and belts, and iron for roof. Señor Chellini agrees to use only native rock and to sell plaster to the Government at 12 per cent reduction. The contract is to be in force after approval by the National Congress, and the factory should be in operation within a year thereafter.

The Government has conceded to the Compañía Anónima Generadora de Fuerza y Luz Eléctrica, the corporation interested in the hydroelectric plant at Mamo, now being installed under the direction of J. G. White & Co. (Ltd.), exemption from customs duties on machinery, piping, tools, and other materials necessary for completing the plant and installing the service in Caracas, La Guaira, Macuto, and Maiquetia.

Automobile and Railway Enterprise.

A 30-year exclusive contract has been signed between the Government and Norberto Borges which provides, upon congressional approval, for automobile service over an extensive territory—from Valencia, passing through Tocuyito, Tinaquillo, Tinaco, San Carlos, Acarigua, Ospino, and Guanare, to Barinas, with a branch from Acarigua to Barquisimeto. The enterprise may establish auxiliary services in States of Cojedes, Portuguesa, and Zamora, after securing Government consent. The concessionaire also will have preference for five years, over others, terms being equal, to any concession which may be granted for constructing a railroad over same territory. Exemption from customs duties is granted on all materials, tools, etc., needed for installing and operating the service and for its conservation, during the life of the contract. The first section, Valencia to San Carlos, must be in operation within 1 year after commencing work, the second section, San Carlos to Acarigua and Barquisimeto, within 2 years, and the third, Acarigua to Barinas, within 3 years. No taxes are to be imposed, except the instruction stamps. Persons familiar with the country state that the section to be covered by this automobile service is rich and productive, that enough traffic can be found to make a railroad profitable, and that its construction would not be exceptionally expensive.

Navigation Decree—Sailings Resumed.

A Venezuelan decree provides that the regulations for prevention of collisions at sea to be observed by Venezuelan vessels shall be those agreed upon at the International Maritime Conference of Washington,

of October 16, 1889, with latest modification of certain international rules, initiated by Great Britain.

The Royal Mail Steam Packet has resumed biweekly service between La Guaira and Port of Spain, Trinidad, suspended upon the recent development of some few cases of bubonic plague in Trinidad. The new vessels *Balantia* and *Berbice* are assigned to this service, and stops are made at Pampatar and Carupano, between La Guaira and Port of Spain, at which latter port connection is made with the company's steamers between New York and Southampton, via Colon.

Thornless Cactus—Chicle-Gum Enterprise.

The Ministry of Fomento has ordered some thornless cactus plants from Los Angeles, Cal., to ascertain if their cultivation will be successful in arid regions of Venezuela.

The Minister of Fomento gives to José Patrocinio Cuéllar, of Caracas, the exclusive 10-year privilege to establish one or more plants for extracting chicle, an industry not now exploited in the country. He is under the obligation to do all in his power to extend the planting and cultivation of the trees which produce this gum. If for one year he ceases to operate actively under this concession it lapses to the Government and he will be obliged to make public the processes he employs to manufacture chicle. The contract will be in force from the time it is approved by the National Congress. American manufacturers of chewing gum who desire to secure chicle from Venezuela should correspond with Señor Cuéllar.

Plans for Improvement and Development.

The President of Venezuela announces to Congress that during the present year the foreign debts covered by the protocols of Washington of 1903 will be completely paid. He suggests that the 30 per cent surcharge on the customs duties collected at Puerto Cabello and La Guaira, which has been used to pay the indebtedness mentioned, be still continued and the product of this surcharge be applied to public objects, among which he mentions ways of communication, methodical propaganda of immigration, colonization, establishment of a Federal School of Agriculture, sanitation, and compliance with the obligations coming from the contract with the railroad from Valencia to Puerto Cabello.

The President of Venezuela has directed that an investigation be made of the present state of the national colonies "Independencia" and "Bolívar" in respect to their present population, nationality, sex, age, etc.; areas cultivated, nature of operations, and agronomic conditions; climatic conditions, rainfall, and health; ways of communication and methods of transportation; extent of uncultivated land, uses to which it can be put, and whatever other conditions that can be ascertained. This information will be used to develop these colonies, as a basis for studying the methods which will best conduce to colonization of unoccupied areas of the country. A new colonization law is now before Congress.

The British Empire Trade Commission, at its first meeting in London in mid-June decided to devote the next six months to inquiry into trade conditions in the United Kingdom with relation to the rest of the Empire, and will leave for Australia in January, 1913.

NOTES FROM INDIA.

[From Consul Stuart K. Lupton, Karachi.]

Figs—Port Loan—Barley.

Cuttings of Smyrna and English hothouse figs have recently been received at Karachi for use in experimental cultivation.

The Karachi Port Trust has applied to the Government for sanction to raise a loan in India during 1912 of 3,000,000 rupees (\$973,000).

Consignments of Indian barley to the English markets last year were found excellent and were taken up and used in a number of breweries. Subsequent supplies are, however, said to have been not so good, but British brewers are of opinion that with proper care Indian barley should command a good price.

Indo-Persian Railway—Foreign Trade.

The survey which is being conducted on the Mekran section of the projected Indo-Persian Railway has resulted in the discovery of a practicable route from Karachi to Gwadur. No gradient is steeper than 1 in 90, while as a rule a gradient of 1 in 250 can be had. The road runs inland at times, but not to any marked extent. The distance from Karachi to Gwadur as thus aligned is about 450 miles. Alternative routes have been carefully located and their respective merits marked.

A report of the Indian Customs Department gives the following comparison of the commerce of India for the last three fiscal years ending March 31: Total imports—1910, \$519,606,858; 1911, \$562,766,909; 1912, \$640,973,106; and the total exports \$630,527,286, \$704,851,546, and \$772,602,688 for the same years, respectively. The dues collected advanced from \$3,394,421 in 1910, to \$4,245,583 in 1911 and \$4,418,395 in 1912. The trade of Sind for the same three years was: Imports—\$35,036,641, \$41,017,225, and \$46,130,144; exports—\$72,673,182, \$73,008,971, and \$80,620,778.

[From Consul Edwin S. Cunningham, Bombay.]

Bombay Cotton Statistics.

The cotton season is supposed to begin in Bombay on October 1, and on that date in 1911 there was estimated to be 300,000 bales of cotton of 400 pounds each in Bombay. Since then 2,188,000 bales were received up to May 16, 1912.

The feature of the exports of cotton from Bombay during the year has been the greatly increased trade with Japan and China. Already there has been a demand in Japan alone for 736,339 bales, or 292,810 bales in excess of the requirements for last year on the same date.

The stock in the hands of mills, dealers, and exporters on May 16 was estimated to be 700,000 bales.

Engine Imports.

The demand for small engines for irrigation purposes, and for working in sawmills, printing establishments, corn mills, sugar-cane crushing mills, rice mills, small foundries, and other small factories, is on the increase, and for agricultural purposes a growing interest is being aroused. The engine which is most desirable seems to be the oil engine from 3 horsepower up.

The imports of various kinds of engines into Bombay during the fiscal year 1910-11 were: Steam engines and parts, excluding loco-

motives for railways, \$1,040,760; electrical engines, \$364,500; textile engines (not steam), \$2,482,778; other engines (not steam), \$1,811,038; total, \$5,699,076.

Manufacturing Plants.

From the Annual Factory Report for the Presidency of Bombay it is seen that the establishments coming under the control of the factory act increased from 555 in 1909 to 577 in 1910. The additional 22 were distributed over a great variety of lines. The number of working factories was 545 as against 520 the previous year, 269 being perennial and 276 seasonal; 421 of the total were connected with cotton manufacture, and those not working were almost entirely connected with this industry. The total number of persons employed in the manufacturing plants of the Presidency was 230,957. Of these, 184,051 were engaged in the cotton industry alone.

The employment of women and children in factories is of considerable importance; 43,401 women and 10,816 children were so engaged in 1910. An analysis of the statistics shows that during the last five years the number of women employed in the city of Bombay has gradually decreased, being 25,093 in 1906 and 22,288 in 1910, while in the country districts there has been a gradual increase—19,617 in 1906 against 21,113 in 1910. On the other hand the employment of children in the city of Bombay has been growing from 2,741 in 1906 to 3,942 in 1910. In the country in the former year 5,918 children were employed, and in the latter 6,874.

[From Consul José de Olivares, Madras.]

January Trade Record—Rubber Output.

January, 1912, was a banner month in the commercial annals of the Madras Presidency. The aggregate oversea trade for that brief period, as shown by the customs returns, amounted to \$10,216,663, as compared with \$7,828,309 in the month of December, 1911. Of the total January commerce \$6,320,095 represented exports and \$3,896,568 imports.

The annual reports of three South Indian concerns—the Travancore, Orkaden River, and Paloor rubber companies, which are all under the same management—show that these interests had the following acreages planted with Para rubber: Travancore, 1,038.78; Orkaden River, 734.3; Paloor, 399. The Travancore Rubber Co. harvested 29,600 pounds of rubber last year; the Orkaden River Co., 4,465 pounds; and the Paloor, nil. The estimates for this year are: Travancore, 67,000 pounds; Orkaden River, 10,000 pounds; Paloor, 6,000 to 7,000 pounds. Particulars of the crops of the Stagbrook Rubber & Tea Estates, which have 1,022 acres in rubber and 825 acres in tea, give the following rubber output: In 1910, 10,501 pounds; 1911, 30,000 pounds; 1912 (estimated), 62,000 pounds.

The Rani Rubber Co. (Ltd.) harvested 193,750 pounds of rubber last year as compared with 41,983 pounds in 1910; the estimate for the current year is 325,000 pounds of rubber. The company harvested 14,728 pounds in April as compared with 4,475 pounds in April, 1911; and the total for the first four months of this year is 25,110 pounds in contrast to 4,629 pounds in the same period in 1911. This organization has 3,054 acres planted with Para rubber.

FOREIGN TRADE OPPORTUNITIES.

(Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.)

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9063. Machinery and material for oil company.**—An American consul reports that a company was recently incorporated in his district, with a capital of \$5,000,000 to develop the shales. Operations will begin at once, and a reduction plant will be constructed at an estimated cost of \$2,000,000. The shales of the region in question are said to be very rich in petroleum and sulphate or ammonia. The charter of the company gives it the right to construct and operate railroads, acquire property, and many other powers. Manufacturers of machinery and material that would be used in such a plant might do well to get in touch with this company at the earliest moment.
- No. 9064. Railway materials for Siamese State railways.**—The Siamese Legation has furnished copy of specifications, plans, forms of tender, etc., of permanent way material for the Northern Line of State Railways for distribution among such American firms as may care to bid on these supplies. Tenders will be received until July 15, 1912.
- No. 9065. Cast-iron pipe with connections, etc.**—An American consular officer in a European country reports that certain railways in his district are in the market for 2,200 yards of cast-iron pipe with connections, etc. Specifications can be obtained by writing in English to a person named in the report.
- No. 9066. Street sprinklers and street-cleaning devices.**—A contract is about to be signed between a foreign municipality and a company for paving the principal streets of the city. The company also undertakes to keep the streets along which its lines run in good condition. An American consular officer writes that manufacturers of car sprinklers and street-cleaning devices should get in touch with this firm.
- No. 9067. Cotton gins.**—A business man in a Latin-American country informs an American consular officer that he desires prices and catalogues upon a small roller gin for sea-island cotton. He says that his experiments tend to prove that such cotton can be successfully produced in the country in question, and there would probably be a demand for more gins at an early date.
- No. 9068. Can-lacquering machines.**—A report from an American consular officer in the United Kingdom states that a firm in his district has expressed a desire to hear from American manufacturers of can-lacquering machines. Correspondence should be addressed direct to the firm.
- No. 9069. Castile soap.**—An exporter of castile soap in Greece desires to enter into direct communication with importers of this article in cities along the Atlantic seacoast.
- No. 9070. Maize crushers.**—According to information received by an American consular officer, there is at present a great demand in a certain foreign country for maize (corn) crushers. There is at present only one manufacturer of maize crushers in the country in question. A list of firms interested in the sale of this machinery accompanied the report and can be obtained from the Bureau of Manufactures.
- No. 9071. Mineral propositions and timber.**—An American consular officer in Russia has forwarded a communication received from a resident of that country containing a description of a number of mineral propositions which are offered to American investors. Iron works, coal mines, and timber are also offered for sale. Copy of the complete report can be obtained by interested persons from the Bureau of Manufactures.
- No. 9072. Funds for public improvements.**—The mayor of a foreign city has written to an American consular officer that he would like to be placed in communication with American capitalists who might be likely to be interested in financing the city to the extent of \$250,000 for public improvements. Copy of the communication, containing further details, will be sent to interested firms upon application. It is proposed to establish a number of municipal enterprises, and it is thought this proposition might interest contractors or manufacturers of municipal supplies.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 704. Post-office construction.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until July 15, 1912, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring, and interior lighting fixtures) of the United States post office at Fairmont, W. Va. The building is to be one-story and basement, approximately 7,920 square feet ground area, brick faced with stone trimming, and tin roof. Copies of the drawings and specification may be obtained from the office of the custodian of the site at Fairmont or of the Supervising Architect.
- No. 705. Panama Canal supplies.**—Sealed proposals, in triplicate, will be received at the office of the General Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., until July 8, 1912, for furnishing auxiliary electrical equipment for the Gatun hydroelectric station, being switchboards, switching group, transformers, battery, air compressor, and crane equipment. (Circular No. 715.)
- No. 706. Commandant's and officers' quarters.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until August 3, 1912, for commandant's quarters and five officers' quarters at the naval station, Pearl Harbor, Hawaii. Plans and specifications can be obtained upon application to the bureau, or to the Commandant of the Naval Station, Honolulu, or to the Commandant of the Navy Yard, Mare Island, Cal.
- No. 707. Levee construction.**—Sealed proposals for constructing about 1,000,000 cubic yards of levee in the White River levee district will be received at the Mississippi River Commission, First and Second Districts, United States Engineer Office, Customhouse, Memphis, Tenn., until July 1, 1912. Information upon application to Clarke S. Smith, Major, Engineers.
- No. 708. Machines for facing and stacking mail.**—Sealed proposals for furnishing approximately 20 machines for facing and automatically stacking mail during the fiscal year ending June 30, 1913, will be received at the office of the purchasing agent, Post Office Department, Washington, D. C., until July 11, 1912. Prices should be quoted f. o. b. cars at the factory. Copy of the specifications can be obtained by addressing the Purchasing Agent, Post Office Department.
- No. 709. Building operations.**—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until July 16, 1912, for the extension, remodeling, etc. (including plumbing, gas piping, heating apparatus, electric conduits, wiring system, and lighting fixtures) of the United States appraiser's stores, Galveston, Tex. The work comprises a one-story extension of about 2,130 square feet area, a three-story extension of about 2,160 square feet area, and a third story on the present building which has an area of about 6,850 square feet. The extension to be brick faced, with sheet-metal cornices, composition roof, nonfireproof construction. Drawings and specifications may be obtained from the custodian at Galveston, Tex., or at the office of the Supervising Architect.
- No. 710. Replacing roof of storehouse and magazine.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until July 13, 1912, for replacing roofing of storehouse and magazine No. 7 at the naval magazine, Fort Mifflin, Pa. Plans and specifications can be obtained on application to the bureau or to the Commandant of the Navy Yard, Philadelphia, Pa.
- No. 711. Steel oil-storage tanks.**—Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until July 13, 1912, for two steel oil-storage tanks at the naval station, Pearl Harbor, Hawaii. Plans and specifications can be obtained on application to the bureau or to the Commandant of the Naval Station, Honolulu, Hawaii.

Consul Charles K. Moser, of Colombo, states that there are now 1,000 automobile owners in Ceylon. The Automobile Club, Harold North, secretary, care Queen's Hotel, Kandy, is a large and wealthy organization.

EXHIBITION OF PACKING MATERIAL.

[From Consul Louis Goldschmidt, Nantes, France.]

Taking advantage of the four central agricultural meetings which are to be held in 1912 at Bourges, Limoges, Libourne, and Poitiers, the Paris-Orleans Railway Co. has decided to arrange a large exhibition of packing material. Manufacturers of such products are invited to submit their articles for packing poultry, meat, fruit, vegetables, butter, and eggs for transportation.

All exhibited articles must conspicuously show the name and address of the manufacturer, which will thus advertise them. Suggestions are invited with a view to finding the most suitable method of packing provisions for transportation. Such packing devices must be secure, practical, cheap, and procurable in large quantities so as to permit their popular use. Especially desired are packages which assure the security of contents. Prizes will be given to the best models exhibited.

All particulars will be furnished by Monsieur Touzet, Inspecteur Principal des Services Commerciaux, Gare de Cahors, Cahors (Lot). The railway company offers to transport free of charge all articles for exhibition on condition that they will become the property of the company if found valuable and practical, in order to make them known.

It appears that this would be an excellent opportunity for the exhibition and introduction of American goods of this class, particularly receptacles for fruits, berries, vegetables, etc. Some of the methods used in the United States for packing fruits and berries are practically unknown here, particularly such as are used for berries and grapes. Berries are not transported here to any great distance, particularly, I suppose, owing to their being retailed in very shallow flat baskets, which expose the contents to crushing. Grapes are shipped from the south in small boxes containing about 5 to 10 pounds.

If American manufacturers of devices for making wood baskets, crates, etc., exhibited their machines, a market therefor might be found here. It would require intelligent display and a certain outlay for expenses.

International Decorative Exposition Postponed.

Ambassador Myron T. Herrick, of Paris, has been officially informed that the commission in charge of the International Exposition of Modern Decorative Art, which was to have been held in Paris during 1915, has decided to postpone this exposition for a year in order to avoid its coinciding with the Panama-Pacific Exposition at San Francisco.

Form of Sports in Southern Arabia.

Consul Walter H. Schulz reports no motor boats at Aden, Arabia, due principally to the small number of Europeans. A few go in for boating. Rich Parsee merchants may eventually take up this form of sport, but that they will not do so for many years to come seems certain. They seem content with games of cricket and tennis for the present.



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MARKET FOR AMERICAN GLASSWARE.

[From Vice Consul Charles F. Baker, Valparaiso, Chile.]

There is a growing demand for American glassware in Chile, in spite of the large per cent of breakage due to improper packing and rough handling. In fact, it seems as if the United States would soon be able to control the Chilean market in this line, if only the goods can be delivered in better condition, the slightly higher freight rates from Europe notwithstanding.

Hundreds of barrels of American glassware have been examined during the past two or three years by this consulate, and I am persuaded that with greater care and a small additional expense the trouble can, in a large measure, be overcome. The barrels, the average size of which is about 28 by 36 inches, now in use by many American exporters, are considered very convenient cases. They are about the right shape and size for handling and the weight is apparently reduced to a minimum.

Suggested Changes in Packing.

But the cases must be made stronger without adding materially to the weight. This end can be attained by placing, as do some of the German and the Chinese shippers, a center head or partition in the middle of the barrel. This partition should be thoroughly secured on both sides to prevent shifting in case the barrel is packed more heavily in one end than the other. There should then be two extra wooden hoops placed nearer toward the center of the barrel, one on each side of the bulge, and especially when the barrel is more than 30 inches high. The extra hoops should be of wood, because the iron and heavy wire seem to work loose, thus adding weight to the case without serving any purpose. In this way we strengthen the bulge where much of the strain comes.

The selection of the fibers for the inside packing is a matter of prime importance. Generally these materials should be very tough and free from chaff, which has a tendency to trickle down to the sides

and ends of the case; leaving the pieces in contact. Very good results have been obtained by the use of prairie hay, swamp grass, excelsior, and well-selected oat straw. The material should be slightly dampened before use to secure compactness. Every case should be tightly packed so as to avoid any possibility of shifting. It often happens that cases arrive so loosely packed that by simply shaking them one can hear the glass rattle.

In packing this class of goods for export to this coast each piece should have special attention. It is well understood that American manufacturers are always rushed and that their establishments are very extensive and detail is a matter that is difficult to govern, but it is useless to attempt to compete in these lines unless more attention is given to these seemingly minor points that mean so much to the trade here. Tumblers must not be placed one in the other with simply a thin paper between, but they must be wrapped with sufficiently heavy material to prevent contact. Cake stands, glass platters, large flower vases, etc., should be carefully and heavily wrapped separately and in such a manner that if one should break the pieces would be retained in its own cover and not be allowed to shake about, causing damage to other pieces that might otherwise arrive in good condition.

Importer Willing to Pay Extra Expense.

American manufacturers will find that in most cases the importers along the west coast of South America will gladly meet any extraordinary expense incurred in these extra precautions. In fact, they often write the manufacturer to that effect.

It must be remembered that the two markets are a long way apart and that orders can not be duplicated in a few days nor even a few weeks. It is a question of six months practically. And any mis-carriage means loss and disappointment to the importer as well as to the exporter, and business with the United States is discouraged to that extent.

GROWING AMERICAN EXPORTS OF GLASSWARE.

The glassware export statistics of the United States are divided into three classifications, "cylinder, crown, and common window glass," "plate glass," and "all other." The aggregate shipments abroad of the first two classifications up to the year 1911 had remained at such low, almost stationary, amounts that the Bureau of Statistics decided to no longer continue this separate grouping. Beginning with 1911, however, American manufacturers of glassware vigorously sought foreign trade, with the consequence that exports increased in the fiscal year 1911 by nearly half a million dollars over 1910. The Bureau of Statistics, therefore, which had consolidated the classifications of glassware exports for the first half of the fiscal year 1911, found it necessary to renew the separate exhibits; hence the two first-named tables comprise—in the 1911 column—only exports for the six months, January to June, inclusive. As will be seen, the sales of these American glassware goods for that half year were almost double those for the entire 12 months of the fiscal year 1910. Export statistics for glassware to the countries in the Western Hemisphere and total to all countries during the past five fiscal years ended June 30 have been as follows:

CYLINDER, CROWN, AND COMMON WINDOW GLASS.¹

Exported to—	1907	1908	1909	1910	1911
Total.....	\$95,388	\$107,596	\$59,427	\$67,995	\$121,339
North America:					
Bermuda.....	150	121	87	11	160
Canada.....	15,529	50,057	8,933	15,172	46,187
Central America—					
British Honduras.....	895				772
Costa Rica.....	728	567	207	383	850
Guatemala.....	351	757	97	270	447
Honduras.....	671	187	366	422	912
Nicaragua.....	299	4	387	78	186
Panama.....	22,209	4,677	2,686	3,997	5,096
Salvador.....	101	35	60	74	301
Mexico.....	29,004	42,211	37,481	38,415	34,497
Newfoundland.....	103	249	2,136	1,334	1,909
West Indies—					
British—					
Barbados.....					
Jamaica.....	1,824	153	538	114	1,510
Trinidad and Tobago.....					13
Other British.....					
Cuba.....	15,398	1,513	2,176	1,381	5,137
Danish.....	219	10			84
Dutch.....	46	24		108	
Haiti.....	456	86	124	202	104
Santo Domingo.....	656	614	351	629	313
South America:					
Argentina.....			40	235	
Bolivia.....	18		340		
Brazil.....					15
Chile.....	219	1,025		253	727
Colombia.....	602	2,224	449	183	362
Ecuador.....	119	366	29		28
Guiana—Dutch.....	142				
Peru.....	659	219			136
Uruguay.....					131
Venezuela.....	459	34	83		

PLATE GLASS.¹

Exported to—	1908		1909		1910		1911	
	Square feet.	Value.	Square feet.	Value.	Square feet.	Value.	Square feet.	Value.
Total.....	72,309	\$23,678	47,228	\$17,834	37,799	\$15,016	88,596	\$29,683
North America:								
Bermuda.....	105	41	678	208	1,174	420	835	546
Canada.....	17,941	2,756	853	453	2,845	1,981	53,264	14,355
Central America—								
British Honduras.....	2,000	1,029	769	340	1,114	441	933	439
Costa Rica.....	1,833	703	671	357	783	335	6,654	1,125
Guatemala.....	988	395	443	205	116	47	102	48
Honduras.....	1,101	549	1,029	456	1,069	407	1,596	726
Nicaragua.....	149	78	204	121	894	382	6,166	2,169
Panama.....	10,825	4,329	6,888	2,792	4,564	1,759	3,280	1,800
Salvador.....							835	315
Mexico.....	8,533	4,040	7,081	3,088	7,336	3,057	4,085	1,931
Newfoundland.....					216	65		
West Indies—								
British—								
Barbados.....								
Jamaica.....	1,319	415	1,625	583	340	117	40	15
Trinidad and Tobago.....							65	29
Other British.....								
Cuba.....	23,060	7,800	22,867	7,964	10,653	3,814	4,644	1,887
Haiti.....	582	180	526	193	90	28	250	117
Santo Domingo.....	300	104	890	266	83	27	240	144
South America:								
Bolivia.....	200	69						
Brazil.....	311	108	1,980	630			79	49
Chile.....			34	12			31	53
Colombia.....	65	21	28	7	246	82	225	168
Ecuador.....	934	316	300	95	789	256	203	124
Peru.....	1,068	353					500	305
Uruguay.....							1,890	853
Venezuela.....	400	122	117	41	85	30	599	398

¹ Figures for 1911 are for six months only, January to June, inclusive.² Included in "All other glass and glassware" prior to 1903.

ALL OTHER GLASS AND GLASSWARE.¹

Exported to—	1907	1908	1909	1910	1911
Total.....	\$2,509,329	\$2,374,113	\$2,095,932	\$2,722,390	\$3,095,369
North America:					
Bermuda.....	3,658	4,082	4,935	6,891	6,250
Canada.....	892,914	786,900	747,370	951,982	1,092,900
Central America—					
British Honduras.....	8,235	9,000	3,593	4,497	7,896
Costa Rica.....	11,605	12,932	10,310	12,576	10,147
Guatemala.....	6,895	6,962	5,079	8,790	9,121
Honduras.....	8,494	9,425	7,137	6,458	8,415
Nicaragua.....	5,256	4,917	3,995	4,496	7,175
Panama.....	45,394	44,977	38,176	45,662	59,051
Salvador.....	3,995	3,876	5,155	4,128	7,098
Mexico.....	524,629	439,654	337,053	371,800	336,543
Miquelon, Langley, etc.....	115	18	130		51
Newfoundland.....	13,189	7,677	9,167	8,778	15,147
West Indies—					
British—					
Barbados.....					1,755
Jamaica.....					12,780
Trinidad and Tobago.....	21,338	27,116	31,298	29,699	3,654
Other British.....					6,115
Cuba.....	186,810	172,189	133,249	200,146	191,743
Danish.....	1,963	1,315	1,033	1,773	1,279
Dutch.....	2,043	1,674	1,127	1,099	1,570
French.....	338	687	471	697	338
Haiti.....	3,758	3,935	5,423	7,932	9,160
Santo Domingo.....	5,743	8,974	7,234	6,521	8,949
South America:					
Argentina.....	54,747	63,798	62,848	105,068	125,174
Bolivia.....	2,277	7,900	1,756	6,976	4,706
Brazil.....	45,313	50,588	46,834	61,719	73,362
Chile.....	25,495	25,038	13,506	40,323	31,905
Colombia.....	15,099	17,239	15,562	17,028	21,980
Ecuador.....	4,431	10,005	6,967	6,539	6,345
Guiana—					
British.....	1,203	1,845	1,327	1,296	2,045
Dutch.....	312	336	1,180	1,104	117
French.....	61	38	36	83	14
Paraguay.....	470	1,771	309	45	191
Peru.....	16,893	24,204	17,479	17,462	17,431
Uruguay.....	4,785	13,514	8,143	7,181	12,594
Venezuela.....	12,502	9,500	13,237	12,643	22,265

¹ The 1911 column includes the exports for the six months July 1 to Dec. 30, 1910, of "cylinder, crown, and common window glass," and of "plate glass."

During the past several years Daily Consular and Trade Reports have contained frequent foreign trade opportunity inquiries for American glassware, likewise many reviews of the glassware trade abroad. These have elicited much interest from glass makers in the United States, and the Bureau of Manufactures has received letters from them indicating an intention of taking advantage of the openings.

HAWAIIAN PLANTATIONS PAY MORE FOR GOVERNMENT LEASES.

[From Honolulu Bulletin.]

Government land held under lease by plantations is showing a rapid increase in value, and members of the land board believe that thousands of dollars extra will be turned in to the Government in the form of rentals from now on.

What is likely to prove an important precedent in establishing the price to be paid for Government leases is the figure agreed upon recently by the land board and Honolulu Plantation for land at Eiea. Some 200 acres were leased at \$15 an acre. This is in marked contrast to the \$3 and \$4 and \$5 an acre at which lands have been held in many instances.

Of direct bearing on the future rentals that the land board will feel justified in asking was a statement made before the board that Y. Ahin, a Chinese farmer, pays \$40 a year per acre for the Palama cane fields that were formerly rice patches, and that he is clearing \$60 an acre each year. It was stated and noted by the board that in two years this Chinese has cleared \$19,000.

GRAPHITE INDUSTRY AND TRADE.

[From Consul General Robert P. Skinner, Hamburg, Germany.]

The total importation of crude, ground, and scoured graphite into Germany amounts to upward of 32,000 tons per annum, practically all of the business from over-sea countries being concentrated at Hamburg. While the imports from the United States are rather limited in quantity, there is no reason why much more business should not be done if American exporters are able to meet German terms and requirements.

It is exceedingly difficult to submit any satisfactory information in regard to prices, as the variations are considerable in the value of the different qualities. Hamburg firms consulted are all willing to receive American samples, and would then be in position to submit definite propositions. On March 16 powdered amorphous graphite was worth \$2.38 to \$7.14 per 220.46 pounds, and graphite in flakes; both crystals and powdered crystals, \$7.14 to \$28.56. Exporters of graphite to the United States quote good marketable qualities at 1½ to 2½ cents per English pound c. i. f. Baltimore, shipment in bags. When graphite is packed in casks, the weight per cask is 440 pounds. The highest grade of graphite handled in Hamburg is received from Ceylon.

Imports and Exports.

The most recent statistics for Germany relating to the foreign trade in crude, ground, and scoured graphite are as follows:

Imports and exports.	1910	1911
	<i>Metric tons.</i>	<i>Metric tons.</i>
Total imports.....	30,733.0	32,912.0
Whereof from—		
Italy.....	3,323.4	3,247.8
Austria-Hungary.....	16,663.3	17,627.8
Ceylon.....	8,502.5	9,542.5
Japan.....	590.9	673.8
United States.....	497.5	709.7
Total exports.....	3,441.6	3,821.8
Whereof to—		
Great Britain.....	681.3	1,328.6
Austria-Hungary.....	765.0	630.7

According to the statistics of the State of Hamburg, which vary somewhat from those of the Imperial Government, there were 532.2 tons of American graphite imported at Hamburg in 1910, the average price per ton being \$135.66. Figures for 1911 are not yet available. [The addresses of four Hamburg importers of graphite may be secured from the Bureau of Manufactures.]

[From Consul Robert Frazer, jr., Valencia, Spain.]

Valencia's Purchases Made Through Traveling Salesmen.

Graphite crucibles and pulverized plumbago are used by the several small bronze and steel foundries in operation in the Valencia district, but only on a retail scale. Purchases are effected almost exclusively through traveling representatives of English or German exporters who pay periodic visits and call personally on all consumers to book orders, which, although individually small, in the aggregate appear to be of sufficient importance to warrant the expense of traveling salesmen. These travelers, however, do not offer graphite

products alone, but generally carry also belting, greases, and miscellaneous supplies and machinery. Their headquarters are usually at Barcelona, but some come direct from England and Germany.

The plumbago imported in barrels by steel and other metal foundries has of late usually come from Germany and appears to be relatively cheap, as it is sold wholesale at the equivalent of 3½ cents per pound. There are no local wholesale dealers or jobbers handling graphite products.

Tariff--No Native Supply.

In the absence of a special traveling representative to look after their interests in this country and an adequate stock of specialties always on hand here or at Barcelona, American graphite manufacturers would probably meet with more success in introducing their products by interesting one of the important distributing agencies and commission houses established at Barcelona handling general machinery and machinery and workshop supplies, belting, lubricants, etc., which have traveling salesmen visiting all Spain.

The Spanish tariff on plumbago is only about 4 cents per 100 kilos (220.46 pounds). There is no native source of graphite in operation in this country at present and all consumed here is imported. [A list of Valencia users of graphite, plumbago, and graphite crucibles is obtainable from the Bureau of Manufactures.]

[From Geological Survey announcement; see also Daily Consular and Trade Reports for Dec. 9, 1910, and Aug. 23, 1911.]

Production in the United States.

The production of natural graphite in the United States is sporadic, because the milling of disseminated flake graphite is still in the experimental stage and the product is of uneven grade. Because of this unreliability of the domestic supply most of the large consumers prefer to depend on imported material.

In 1911 the quantity of graphite imported into the United States for consumption was 20,702 short tons, valued at \$1,495,729. In contrast to this the total domestic production was 3,618 short tons of natural graphite, valued at \$288,465, and 5,072 short tons of manufactured graphite, valued at \$664,000.

The cause of the unsatisfactory condition of the domestic industry is found in (1) the superiority of much of the Ceylon graphite to any that is mined in this country; (2) the low cost of labor in Ceylon, which permits cheap mining, careful sorting, rubbing up, and blending of the product; (3) the facts that the largest domestic deposits are schists which carry small flakes of graphite disseminated through them, and that the separation of the graphite from the accompanying minerals, especially mica, in such rocks is a problem of unusual difficulty. The one American concern which can be said to have become firmly established in the treatment of such graphite rocks possesses important advantage over other companies in that it manufactures much of its product into graphite paints, graphite grease, etc.

The largest part of the foreign graphite that comes into this country is brought in by American firms which either control or own the foreign mines or have purchasing agents abroad and are therefore in position to take immediate advantage of any change in the markets at home or abroad.

Ceylon's Graphite Deposits.

The graphite deposits of Ceylon are of especial interest to Americans, because most of the graphite used in this country comes from that island and because the United States has for years been the largest consumer of the Ceylon material. Much has been printed in regard to these deposits, but it is widely scattered through publications which are not readily accessible to the American public. The writer has, therefore, summarized the more important facts which are on record.

Although their existence was long known and mentioned in print as early as 1681, the graphite deposits of Ceylon were not exploited until some time between 1820 and 1830. Joseph Dixon is said to have imported a small quantity into the United States in 1829, but it was not until 1834 that the industry assumed any commercial importance. From that time to this, as a result of the growth of metallurgical industries and

the resulting demand for refractory materials, the industry has developed rapidly, until at present graphite is subordinate in value only to tea and the products of the coconut palm among the exports from Ceylon.

Up to 1901 Great Britain consumed more Ceylon graphite than any other country. Since 1901 the United States has assumed first place, with Great Britain second until 1909, when Germany took second place. [Plumbago invoiced at the Colombo consulate for shipment to the United States had a declared value in 1910 of \$1,789,035, and in 1911 of \$1,034,331.—B. of M.] It is interesting to note that an American firm is one of the principal exporters of Ceylon graphite. With the exception of the operations of this firm and of a limited amount of graphite mining done on tea estates, the industry is in the hands of native Cingalese. It has been estimated that the various processes of mining, sorting, "curing," packing, and shipping graphite, as well as making the barrels in which it is exported, provide employment for about 50,000 men, women, and children.

Location of Deposits—Mining Methods.

The deepest and best graphite mines are near Kurunegala; others are located near Kegalla, about 15 miles to the south, and near Ratnapura, both in the Province of Sabaragamuwa. The graphite is mined either from open pits or through vertical shafts connecting with underground workings. Most of the mines are not deeper than 100 feet, though a few go as deep as 400 or 500 feet. On account of the heavy rainfall water is one of the chief obstacles to deep mining. In a few mines steam pumps and hoists are employed, but as a rule the mining methods are still crude, the acme of mechanical ingenuity being reached in a windlass operated by five or six men for hoisting the graphite in a sort of tub. The workmen usually ascend and descend by means of rough wooden ladders, tied with jungle ropes and rendered exceedingly slippery by the graphite dust and water.

The mineral as it comes from the pits may contain as much as 50 per cent of impurities, mostly in the form of quartz and wall rock. It is conveyed in bags to a dressing shed, where it is picked over and the impurities reduced to 5 or 10 per cent. It is then packed in barrels for transportation to Colombo or Galle. At these ports it is unpacked and submitted to further treatment known as "curing." The graphite merchants have fenced yards or "compounds" for the final preparation of the graphite for the market. In the methods of "curing" there is some diversity, but the first step is usually to set aside the large lumps and to pass the remainder through stationary screens of several different sizes of mesh. The large lumps and the screened pieces are then broken with small hatchets by Cingalese women to remove the coarser impurities, such as quartz, and are then rubbed up by hand on a piece of wet burlap and finally on a piece of screening to give them a polish. Finally, various grades coming from several mines or differing in size or texture are blended to meet the requirements of purchasers, a process requiring skill and long experience.

The poorer material is usually beaten to a powder with wooden mauls or with beaters shaped like a rolling pin, and is then sorted into different grades. In some establishments the impure grades are washed in a tub or pit. In this process the mineral is placed in saucer-shaped baskets and by a circular "panning" motion of the immersed baskets the graphite particles are thrown off into the pit, while the heavier impurities, especially pyrite, remain behind. To separate the very fine material, the powdered graphite is placed in a basket shaped somewhat like a large dustpan. The contents of the basket are thrown into the air, and the heavier particles fall back into the basket, while the finer material is blown forward and falls on the floor.

Korean Graphite Mines.

The following information in regard to the graphite deposits of Chosen (Korea) is taken from a private report prepared in 1909 and placed at the writer's disposal through the courtesy of Mr. Charles Pettinos:

The existence of large deposits of graphite in Chosen has long been known, but no attempt was made to develop them until within the last few years, the first mention of graphite in the Chosen customs returns being in 1903, although sample shipments had been made before that time. Graphite is known to occur in all the Provinces, but appears to be most abundant in the Province of Kyeng-Sang, which is nearest to Japan, in Chung-Cheng, one of the western Provinces, and in the northern Province of Pyeng-an. Up to June, 1909, 65 mining rights had been granted under the Chosen laws for the mining of graphite and over 40 more were pending.

In 1909 there were five producing mines in Chosen, all operated by Japanese firms. The first of these mines is situated in the northern part of Chung-Cheng Province, not far from Whang-gan station on the Seoul Fu-San Railway, over which the product is shipped to Fu-San. The second mine is not far from the first in the northern part of

the Province of Kyong-Sang. The graphite from this mine is transported by river to another station on the Seoul Fu-San Railway. Both of these mines are controlled by the same company, which employs in them 30 Japanese and 100 Koreans. The other three productive mines are located in close proximity to one another in the northern customs district of Gen-San and employ about 345 Koreans and 32 Japanese. Transport is costly, being effected partly by oxcarts, partly by river boats, and partly by junks to the port of Gen-San. All the deposits mentioned are amorphous graphite. Some of them are said to be of large size and easily mined. The percentage of carbon in the material which has been shipped is stated to vary from 60 to 85. Crystalline graphite is also known to occur in Chosen, and one property in Pyeng-an Province is being investigated.

Most of the Chosen graphite which has gone to Europe or America has been shipped from Japanese ports. It can be laid down at these ports at a cost of \$10 to \$13 per long ton. Considerable quantities of Chosen graphite are now being utilized in the United States, where it comes into competition with the amorphous graphite imported from Mexico. The quantity of Chosen graphite imported into the United States in 1911 was probably in the neighborhood of 2,000 long tons.

UNIFIED SYSTEM OF GERMAN STENOGRAPHY.

[From Consul Talbot J. Albert, Brunswick.]

The so-called committee of 23 which is to prepare a plan for a unified system of German shorthand writing held a session on April 29 and 30 at the Ministry for Public Instruction in Berlin. The following representatives of the different systems of stenography belong to the committee: Six of the Gabelsberger school, 5 of the Stolze-Schrey, 3 of the school Stolze, 3 of the National Stenography school, 2 of the Stenotachygraphy, and 1 representative each of the Arends, Roller, Brauns, and Faulmann schools.

The consideration of the questions submitted by the Government to the committee resulted in adopting the following resolutions: The representatives of the different systems are prepared under all circumstances to create a unified system of German stenography, even if such system contains little or nothing of the method of the particular system represented. The unified system shall have a fixed regulated character, and by its capacity for abbreviation as a method of expression shall meet all possible shorthand purposes. (Proposition of the Gabelsberger and Stenotachygraphy schools.) The rules of the commercial hand shall be simple, fixed, and burdened with few exceptions, otherwise the establishment of the system would be doubtful. The choice of signs and rules shall guarantee an easy and sure legibility and also a quick and rapid writing. (The last two propositions were unanimously adopted.)

Finally it was unanimously resolved to appoint a subcommittee of nine, one from each school, which should sift the proofs at hand of each method and report to the chief committee for a second conference the questions which should serve for the attainment of correct lines upon which a unified system of stenography can be based. [Earlier steps looking toward a unification of German shorthand systems were described in Daily Consular and Trade Reports on Aug. 19, 1907]

AMERICAN DRILLERS IN BURMA.

[From London Financial Times.]

Two expert American drillers have just sailed from London en route from the United States to the Burma oil fields, where they are to erect and operate the first Parker rotary drilling installation in that field. This has been shipped to the order of the Burma Petroleum Co., on whose territories it will be used.

SESAMUM CROP IN INDIA.

[From Vice Consul General Charles B. Perry, Calcutta.]

A supplementary memorandum on the sesamum crop of the 1911-12 season in India, issued by the Director General of Commercial Intelligence, shows that the total area under cultivation was 3,726,200 acres, as compared with 4,306,000 in 1910-11, and the estimated yield 371,400 tons, against 511,800 in the preceding season. The following table shows the area and yield, by Provinces, for the two years:

Provinces.	1910-11		1911-12	
	Area.	Yield.	Area.	Estimated yield.
	<i>Acres.</i>	<i>Tons.</i>	<i>Acres.</i>	<i>Tons.</i>
United Provinces.....	1,338,900	135,400	1,175,000	99,000
Central Provinces and Berar.....	895,300	76,400	916,900	74,900
Madras.....	573,200	49,300	628,300	52,600
Bombay.....	994,800	109,400	513,400	29,200
Eastern Bengal and Assam.....	251,500	39,700	231,300	38,200
Bengal.....	237,600	39,700	247,200	37,700
Punjab.....	148,700	14,900	92,200	9,900
Sind.....	88,300	12,000	58,000	4,500
Hyderabad.....	677,700	34,400	663,900	25,400
Total.....	5,206,000	511,800	4,526,200	371,400

¹ Including Native States.

Of the yield in the United Provinces in 1911-12, 301,400 tons was pure and 70,000 tons mixed, as compared with 421,800 and 90,000 tons respectively in 1910-11.

LEVANTINE BUSINESS NOTES.

[From the Near East.]

Big contracts.—The Industrial Building Co. of Alexandria has obtained the contract for the building of the workshops and stores of the Suez Canal Co. at Port Said, the price being \$160,000. It is expected that the Société du Creusot will obtain the contract for the construction of the new breakwater for \$460,000.

Pipe lines and refinery.—The *Bourse Egyptienne* states that the Anglo-Egyptian Petroleum Co. has purchased in Suez 107 acres on which to erect a refinery. The company is, moreover, contemplating construction of a pipe line from Gensah to Suez. Another attempt is being made to build a Russian pipe line from Grosny to either Novorossisk or Touapse.

Public sewage works.—Lord Kitchener refers in his report to the newly constructed mixed municipality at Port Said, and says that it has proved successful. Its revenue for 1912 is estimated at \$116,000, of which \$61,500 represent the Government contribution to the town expenses. The arrangements for the drainage scheme are being pushed rapidly, and it is hoped that the actual work will be commenced this year.

American coal.—The Consolidation Coal Co. has dispatched two steamers from Baltimore with 5,000 tons coal each for the Egyptian State Railways. This is the second contract for coal from that source. This contract calls for 50,000 tons, the first having been for 40,000 tons. [The Bureau of Manufactures has issued various trade opportunity notices and circulars in the past two years calling attention to the coal trade of Egypt and the Mediterranean.]

Mariout Railway.—Since the occupation of Tripoli and Cyrenaica the Khedive's railway line from Alexandria to Mariout has assumed considerable importance from a strategical, as well as a commercial, point of view. It is now announced that the Egyptian Government is about to acquire this line, which it has the intention of extending to Solloum. The Khedive will receive in exchange the large estates of Korachieh and Santa, which are among the finest lands in Egypt.

BRITISH INDUSTRIAL NOTES.

[From Consul Albert Halsted, Birmingham.]

Profits of Municipal Undertakings.

Birmingham owns and operates its water, gas, and electric supply and the street railways serving the city. From the accounts of these four undertakings for the municipal year ended March 31, 1912, it appears that the first three had a total profit, after making the usual allowances for sinking fund, depreciation, etc., of \$740,910, but that the water department had a deficit of \$355,731, a reduction of \$9,655 from the previous year. However, the water department charged only \$316,323 of this deficit to taxation, the balance being applied one-half to capital account and the other being carried forward.

The gas department, after expenditure for maintaining the plant at the highest degree of efficiency, allowance to public lighting account, sinking fund, etc., had a profit of \$392,634, an increase of \$24,526 over the previous year and the greatest amount on record. In addition, there was \$15,977 interest on the reserve fund, which, with the profit, was applied for the relief of taxation. The net average price of gas was reduced from 46 cents to 43 cents. The profits of the electric supply department applicable for the relief of taxation were \$113,083, an increase of \$23,301 over 1911. This surplus remained after the ordinary allowances for sinking fund, payment of interest on money borrowed, and carrying forward \$121,663 to the renewal fund. The Birmingham street railways, after meeting interest and sinking-fund charges and providing for the interest on the purchase money of a private line, placed \$243,325 to the reserve fund and had \$219,216 applicable for the relief of taxation.

Steel Balls for Polishing Castings—Electric Vehicles.

A prominent technical publication is authority for the statement that by introducing into a rumbling barrel steel balls one-sixteenth to one-fourth inch in diameter it is possible to polish castings and actually to burnish them to a very high degree. It appears to be customary to use enough balls to make up approximately twice the volume of the pieces to be rumbled.

The Engineer reports that a new organization is being formed in London to introduce all kinds of electrical pleasure and commercial vehicles propelled by Edison nickel-iron batteries. It is said that the Edison people in London contemplate establishing a large depot for the display of these vehicles, and that the central station authorities are prepared to furnish the necessary charging facilities.

Bicycle, Motor Cycle, and Automobile Trade.

British trade in ordinary bicycles for the current year will probably show results above the average, while the makers of motor cycles in the Birmingham district are exceeding previous records in output. Manufacturers' sales are said to be limited only by their productive capacity. In the automobile industry there was delay due to a shortage of certain materials, particularly special Sheffield steel, but now manufacturers are very busy.

During the first four months of the current year bicycles worth \$1,101,941 were exported from the United Kingdom, and shipments of bicycle parts aggregated \$2,690,892. Motor cycles valued at \$663,007 and parts amounting to \$232,663 were also exported. The

total value of automobiles, chassis, and parts exported for the first four months of 1912 was \$5,530,057. It is interesting to note that the aggregate value of automobiles and parts imported during this same period was \$11,774,725.

Results of Formation of Metal-Bedstead Trust.

As a result of the formation of the federation of metal-bedstead manufacturers [noted in Daily Consular and Trade Reports on Mar. 4, 1912], which organization includes 98 per cent of the entire industry, steps were taken to bring selling prices into closer relationship with the cost of production. This led to advances which varied in amount up to 10 per cent. Later, after the settlement of the coal strike, there was a sharp advance in prices of tubes, angles, and other materials, so that at the beginning of May the federation advanced its selling prices by $11\frac{1}{2}$ per cent.

The total value of metal bedsteads and parts exported from the United Kingdom during the four months ending April 30, 1912, was \$1,159,818; in the similar period of 1911 the value was \$1,108,428 and in 1910, \$851,579. It is interesting to note as showing the increases in prices following the formation of the federation that though the value of the exports for the first four months of this year was \$51,390 more than in 1911, the weight of the material shipped was 223 long tons less, the total weight for the first four months of 1912 being 7,559 long tons.

CANADIAN FRUIT AND TOBACCO OUTLOOK.

[From Consul Felix S. S. Johnson, Kingston, Ontario.]

The first fruit-crop report of the season issued by the Canadian Department of Agriculture indicates a splendid fruit year for the Dominion; the yield will, of course, depend on the weather to come. Prospects for a good apple crop are excellent; pears share in the good conditions shown by apples. The extremely low temperature of January and February seriously injured the peach blooms, but fruit growers of the Niagara district report that there are still more than sufficient left for a medium crop if no further casualties occur. Plums, grapes, cherries, strawberries, currants, and gooseberries wintered well. The raspberry canes were injured slightly. In some cases blackberries were hurt, but not seriously enough to affect the crop.

In the Province of Ontario a smaller acreage will be under tobacco this year than in 1911, but as this will probably result in more attention being given to the crop, a better quality is expected. The tobacco crop of 1911 was the largest on record (more than double the yield of any previous year), and is estimated to have amounted to 15,000,000 pounds, for which the farmers received \$1,700,000. Some cultivators received $12\frac{1}{2}$ cents a pound, which figure the farmers say means a profit. Tobacco culture in Canada is confined almost wholly to the Province of Ontario, but in parts of the Province of Quebec the plant is grown, mostly for home use. In the fiscal year ended March 31, 1912, the Dominion exported 58,809 pounds of Canadian-grown leaf tobacco, valued at \$25,944. These shipments were divided; 8,761 pounds to Great Britain, 40,856 pounds to the United States, and 9,192 pounds to other countries, with respective values of \$1,320, \$22,521, and \$2,103.

NEW PACKING MATERIAL FOR CALIFORNIA GRAPES.

By a series of experiments extending over the past six years, the Department of Agriculture has found that California grapes packed with a filler of redwood sawdust keep better and longer in cold storage than when packed in ground cork. This opens a new field for the sale of Red Emperor grapes in the Eastern markets at a time when the problem of disposing of a large part of this crop is attracting attention from the growers. These grapes ripen at the end of the season and have hitherto been stored in open crates with only fair success. By picking the grapes at the proper time and packing them in redwood sawdust they can now be kept in excellent condition until about January 10, thereby enabling the growers to take advantage of the Christmas demand.

The extent to which a market for these grapes can be developed is as yet unknown, as only small experimental shipments have as yet been made. The two carloads shipped to the East during 1911 were favorably received by the trade and brought prices that yielded the growers a good profit. A number of growers are planning to pack their fruit in this manner this year, so that the shipments to the East may amount to 50 carloads or more. Small shipments of high quality Tokay grapes packed in this manner were sent from California to England and met with ready acceptance.

Specially Prepared Sawdust Required.

Redwood sawdust has been found to be peculiarly adapted to use in fruit packing, as it is more nearly neutral in odor and flavor than even ground cork and therefore does not impart its taste or odor to the fruit, as would the sawdust from other kinds of wood. The sawdust coming from the band saws used in the redwood mills is carefully dried and then sifted to eliminate the fine dust and the slivers, leaving about 50 per cent of the original sawdust suitable for use in packing. The preparation of the sawdust is done by some of the sawmills, one company having installed special machinery for the work, and the Department of Agriculture has an agent in the field to assist the growers in selecting the proper fruit for packing and in obtaining properly prepared sawdust.

Careless Shipping a Danger.

Possible sources of danger to this new industry are careless selection or packing of grapes by some growers, resulting in injuring the reputation of the storage grapes before they have gained a firm position on the market, and the possible overstocking of an undeveloped market. Only the finest grade of grapes should be used and they should be packed in properly prepared pure redwood sawdust.

The careless method of handling fruits in vogue at some transshipment points is particularly mentioned by the experts of the Department of Agriculture as a factor which tends to injure the fruit trade of the United States, especially in the foreign markets. The fruit growers of the United States have learned how to pack fruit so that it can reach its destination in good condition if properly handled, but their best efforts are often set at naught by the improper handling of the packages in transshipment.

THE SHEA BUTTER OF AFRICA.

[From Consul W. J. Yerby, Freetown, Sierra Leone.]

The commodity, next to tin, regarded as of the greatest importance in Northern Nigeria, is shea, in the form of the shea nut or shea butter. The shea tree, which is not found in the palm belt or near the coast, abounds over practically the whole of Nigeria between the latitudes of Lokoja and Kano, and the area of its cultivation is therefore served by rail and river transport, states a recent report to the Colonial Office at London by one of the Government officials in Northern Nigeria.

Shea has been exported for some years from districts adjoining the navigable waterways. The total exports of nuts increased from about 2,000 tons in 1906 to 9,000 tons in 1909, but owing to two bad seasons along the river and possibly to the large amount of labor taken for railway work the quantity exported decreased to about 4,500 tons in 1910. From 100 to 150 tons of shea butter appear to have been exported in 1909 and 1910. The Baro-Kano Railway opens up an entirely new field for this product. The basin of the Benue has hardly been touched for shea, and it is estimated that possible exports from Muri Provinces alone would be limited only by the capacity of the river steamers available.

Shea butter is used by the natives in Northern Nigeria and other parts of West Africa as an illuminating oil, for cooking, and as a medicine in the form of an unguent for rheumatism and other ailments of the body. For this latter use the natives prize it very highly. In appearance it is between that of beef tallow and mutton suet.

This product is shipped by the exporters of native products located at Lagos, Southern Nigeria, a list of whom is on file in the Bureau of Manufactures, Washington, D. C.

UTILIZATION OF ATMOSPHERIC NITROGEN.

The Bureau of Manufactures has just published a monograph by Consul Thomas H. Norton, of Chemnitz, Germany, entitled "Utilization of Atmospheric Nitrogen." The consul has been on special detail for the Department of Commerce and Labor.

For many years the world has been dependent on the nitrate beds of Chile for supplies of combined nitrogen, and as these beds are not particularly extensive and as the demand for combined nitrogen by the manufacturing and agricultural interests is rapidly increasing, serious efforts have been made to discover new deposits, and many prominent chemists have endeavored to perfect processes for utilizing atmospheric nitrogen. The monograph describes in detail the results obtained by the foremost European chemists, and the commercial as well as the technical aspects of the new industry are dealt with at length.

The subjects handled are the present supply of nitrogen, the synthetic production of ammonia, the synthesis of nitric acid, hydrocyanic acid, cyanides, nitrides, and calcium cyanamide from atmospheric nitrogen, and coal waste and peat as sources of ammonia. The monograph may be obtained upon application to the Bureau of Manufactures.

STREET RAILWAY PRACTICES IN GERMANY.

[From Vice Consul General De Witt C. Poole, jr., Berlin.]

I am reliably informed that no assessment of the cost of street railway extensions on the property supposed to be benefited thereby is made in Berlin. Real estate development interests not infrequently approach the local street railway companies on the subject of extensions into the locality which it is desired to develop. In these cases the street railway companies usually demand a guaranty of earnings for a limited period, contracting sometimes for compensation in accordance with transportation facilities offered. Thirty-five pfennigs (8½ cents) per car-kilometer (kilometer = 0.62 mile) is a rate of compensation frequently agreed upon. These are, however, purely voluntary arrangements.

It is usual in Germany for street railway companies to pay a certain portion of their gross earnings to the municipality within the jurisdiction of which they operate. In Berlin the portion is at present 8 per cent. The franchise is in the nature of a contract, and the city stipulates for an option to take over the entire street railway property at a prearranged price on the expiration of the franchise.

BRADFORD SHIPMENTS TO UNITED STATES.

[From Consul Augustus E. Ingram, Bradford, England.]

Declared exports to the United States from the Bradford consular district for May, 1912, amounted to \$1,357,597, an increase of \$598,654 over May, 1911—more than accounted for in raw wool, which amounted to \$726,132 (British wool, \$147,905; colonial and foreign wool, \$578,227), the figures in May, 1911, being \$81,613 (British wool, \$42,947; colonial and foreign wool, \$38,666). In mohair, pickled sheepskins, leather, and a few other items there were slight increases, but in stuff dress goods, cotton linings, and other finished goods, as also yarns of all kinds, there were marked decreases.

Apple Industry and Exports.

The Bureau of the Census reports that on April 15, 1910, there were 151,323,000 apple trees of bearing age, and 65,792,000 trees of nonbearing age, in the United States; the production of apples in 1909 was 147,522,000 bushels, valued at \$83,231,000. According to the Census of 1900, there were 201,794,000 trees reported June 1, 1900, and the production of apples in 1899 was 175,397,000 bushels. Only about 10 per cent of the apples produced in this country are exported. They represent the very highest qualities in fresh fruit—about \$5,300,000 worth on an average for the past two years—and 45,000,000 pounds of dried apple exports last year, worth \$3,850,000.

Chicory, which is mixed extensively with coffee in Russia, is scarcely imported, as the home-grown chicory from the central parts of the Empire furnishes ample supply. Consul General Snodgrass states that the 17 chicory factories are principally in Poland and the Baltic Provinces, where the people use coffee to a greater extent than Russians in general, who are tea drinkers.

TELEPHONE OPERATIONS IN DENMARK.

[From Consul General E. D. Winslow, Copenhagen, Denmark.]

The annual report of the telephone company of Copenhagen for 1911 indicates prosperity. Receipts from rentals were \$1,050,000, from public phones \$191,000, for removals and entrance fees of new clients \$54,000.

Wages paid amounted to \$325,000; \$290,000 was expended in repairs and betterments; interest charges were \$145,000; the income tax took \$8,000. There was \$270,000 written off for wear and tear. The stockholders received \$225,000, or 6 per cent on the par value of their stock; \$27,000 was set aside for the pension fund, and the board of directors received \$5,000 for their year's labor. The amount written off for deterioration amounted to 3.3 per cent of the combined stock capital and bonded indebtedness. The Government will take over the company in 1918. The Copenhagen Telephone Co. operates not only in this city, but also over all the island of Zealand, which includes a territory of 2,000 square miles, with 1,100,000 people.

NEW STATION AT PANAMA.

[From Canal Zone Record.]

Plans for a modern passenger station to be built by the Panama Railroad Co. in connection with the proposed improvement of its Panama terminal, have been approved and preliminary work on the site has been begun. The main part of the new building, a front view of which is published herewith (issue of June 5), will be of the Italian Renaissance style of architecture, will have a frontage on Central Avenue of 170 feet, and will extend back from it 55 feet. The construction of the main part of the new station, outside of the foundations, will probably be done by contract, and bids for this work will be asked for within a short time. [Any call for bids for construction or for building supplies for the station will appear in "Proposals for Government Supplies," Daily Consular and Trade Reports.]

SHORTAGE OF FLOUR IN LONDON.

[From London Financial Times, June 6.]

At a meeting of the Master Bakers' Protection Society in London last evening it was decided to make inquiry of the leading bakery companies asking if they were prepared to at once raise the price of bread (in which event the society would so advise local associations) and to send a deputation to the Board of Trade to-morrow to point out the seriousness of the situation arising from shortage of supplies of flour owing to the strike.

NEW CANADIAN STEAMSHIP SERVICES.

[London Times' correspondence from Ottawa.]

The Government is inviting tenders for a steamship service from Canada to British Guiana, calling at intermediate ports, and for a line from Canada to Jamaica with a call at Bermuda. The Government of Jamaica gives a subsidy of \$100,000. These services are to be constituted in view of the new trade agreement which is expected to come into force at the end of the year.

New English Cooperative Bacon Factory.

The Herts and Beds Cooperative Bacon Factory's corner stone was laid at Hitchin on June 11. This \$100,000 undertaking is wholly British, and in that respect, says the London Times, is the first farmers' cooperative bacon factory in England. The counties of Hertford and Bedford contain over 50,000 pigs, and it is expected that this number will soon be much increased.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

No. 712. Navy Department supplies.—The Bureau of Supplies and Accounts, Navy Department, Washington, D. C., will receive bids until July 2, 1912, for the following supplies. Firms interested therein should make application to the Bureau of Supplies and Accounts, giving the schedule numbers desired: Schedule 4649, bituminous coal; schedule 4650, cocoa, wheat flour in tins, evaporated milk. Bids are invited until July 9, 1912, for the following: Schedule 4651, tinned biscuits, green coffee, lemon and vanilla extracts; schedule 4633, mild rod steel. Tenders will be received until July 16, 1912, for the following supplies: Schedule 4653, enlisted men's revolver belts and holsters, officers' revolver belts and holsters, vitribeosts pipe covering, rubber ponchos, electrical recording thermometer, leather hat washers; schedule 4657, boat chains, brass bull's-eye and signal lanterns, compressed air locomotive, lavatories, brass cross hooks and rings, Renshaw ratchets, panel and rip saws, machinists' hand taps; schedule 4660, billiard cloth, momie cloth, air hose, garden hose, mineral engine oil, whale oil, white cotton sheeting; schedule 4661, cutting compound, steam traps, phosphorus low pig iron; schedule 4663, printed forms; schedule 4655, compressed-air locomotive; schedule 4662, seamless copper and brass pipe, naval round rolled brass, naval rolled rod, brass, sheet brass, bar iron; schedule 4656, hydraulic blocking for powder presses; schedule 4652, steel rails and angle splice bars, creosoted railroad ties; schedule 4664, building red bricks, red lump fire clay, silica clay, crushed canister, broken limestone, silica crushed rock, molding Albany sand, blast sand, carborundum sand, white beach sand, green silica molding sand, Jersey coarse fire sand, molding Jersey sand, Lumberton sand, yellow molding sand; schedule 4659, naval rolled brass plates, hard-drawn rod brass, brass shapes and bars, bar iron, galvanized sheet steel; schedule 4654, manganese bronze in ingots, round naval bronze; schedule 4658, medium steel angles and I beams, special treatment steel plates.

No. 713. Construction of public buildings.—Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring, and interior lighting fixtures) of the following buildings: (1) Until July 26 for the extension, remodeling, etc., of the United States post office at Oil City, Pa., the extension to be one story and basement of approximately 1,227 square feet ground area; stone faced; tin roof; fireproof construction. (2) Until July 29 for the extension, remodeling, etc., to the United States post office and customhouse at Bristol, R. I. The extension is to be one story and basement, of approximately 1,335 square feet ground area, brick faced, with stone trimming and tin roof. (3) Until August 6 for the United States post office at Carrollton, Ga. Building will be two stories and basement and will have a ground area of approximately 3,800 square feet, nonfireproof construction, stone, brick, and stucco facing, terra-cotta cornice, and tin roof. Drawings and specifications may be obtained of the custodians of the various sites or of the Supervising Architect.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

No. 9073. Machinery of various kinds.—A member of an American manufacturing firm writes the Bureau of Manufactures that one of its customers desires a machine that will grind wood shavings into sawdust. A large demand exists for this class of machine; another foreign customer desires a machine that will chop up sugar cane into pieces suitable for horses and cattle, at the same time making a smaller product suitable for chickens.

No. 9074. Honey.—A business man in a city of 67,000 inhabitants, in a busy mining and manufacturing section, informs an American consulate that he desires to hear from American exporters of honey.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year Washington, Wednesday, June 26, 1912 No. 150

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COMMERCE AND INDUSTRIES OF NORWAY.

[By Vice Consul General Haakon E. Dahr, Jr., Christiania.]

According to the advance reports, the imports into Norway increased in value from \$107,760,951 in 1910 to \$118,487,678 in 1911, and the exports rose from \$73,186,566 to \$74,079,810. The figures for 1911 are subject to revision. The bulk of Norway's trade is with Great Britain and Germany, the latter country always holding the balance of trade strongly in its favor.

The trade with the United States is increasing and new articles are constantly being introduced, but the progress might be more rapid if American manufacturers would make greater effort to secure this trade. While salesmen from other countries are numerous in Norway, those of American firms seldom appear here. If salesmen with samples can not be sent, local agents or commission men should take their place. The total exports to the United States, as declared at the consulates in Norway, were valued at \$7,161,344 in 1910 and at \$8,711,662 in 1911.

Decreased Output of Crops.

The crops in 1911 fell considerably below the general average, although fruits of all kinds gave unusually large returns, due to the long period of warm weather in the summer. The total valuation for the 1911 crops of all kinds, excepting fruits, vegetables, and seeds, is placed at \$49,400,000, against \$54,250,000 in 1910. The official returns for the past two years give the quantities as follows:

Crops.	1910	1911	Crops.	1910	1911
Barley.....barrels..	1,021,988	898,498	Potatoes.....barrels..	7,892,898	7,758,726
Hay.....tons.....	2,760,568	2,586,800	Rye.....do.....	315,734	334,180
Mixed grain.....barrels..	220,317	163,110	Wheat.....do.....	103,515	96,470
Oats.....do.....	3,065,785	3,062,027			

The statistics of the expenditures of the Government and the counties for the promotion of all branches of agriculture in 1911 are

not yet available, but the total exceeded that of 1910, in which year it was \$341,880.

Tobacco is raised on a small scale on the west coast, in the district of Sogn. Experiments with sugar beets were made in 1911 by farmers living in the district of Jaderen, on the west coast, with satisfactory results.

Exports and Imports.

The values of the principal items of export and import in 1911, as given by the official preliminary report, are shown in the following table, compared with 1910 (only articles of Norwegian origin are included in the exports):

Articles.	1910	1911	Articles.	1910	1911
EXPORTS.			IMPORTS.		
Feed stuffs.....	\$407,390	\$942,420	Breadstuffs:		
Fishery products:			Barley.....	\$3,293,800	\$3,542,750
Cod—			Flour.....	2,634,170	3,269,330
Dried.....	3,962,380	4,967,490	Meal, rye.....	1,428,620	1,345,410
Salted.....	4,674,910	6,007,970	Rye.....	5,978,380	7,120,220
Guano.....	404,280	375,170	Coal and coke.....	8,250,510	9,213,520
Herring, salted.....	4,065,690	4,453,440	Coffee.....	3,237,520	4,410,490
Oil.....	2,063,570	2,931,140	Cotton.....	1,412,630	1,335,200
Roe.....	534,530	311,200	Hemp.....	583,570	283,920
Sardines, etc.....	3,940,570	4,252,360	Liquors.....	910,240	1,329,940
Granite.....	712,160	901,350	Machinery, motors, etc.....	4,397,100	5,450,530
Ice.....	726,010	258,190	Malt.....	106,270	108,790
Matches.....	532,540	551,460	Oil, petroleum.....	1,442,990	1,534,540
Nails.....	174,790	142,740	Provisions:		
Ore, copper.....	2,870	17,150	Beef.....	767,390	705,390
Paper:			Pork.....	416,230	527,180
Printing.....	3,174,310	3,071,820	Rice.....	258,330	208,950
Wrapping.....	2,603,400	2,199,690	Salt.....	595,470	566,190
Provisions:			Sirup.....	835,440	611,120
Butter.....	615,920	886,250	Sugar.....	3,601,120	3,247,190
Margarin.....	150,460	177,340	Tea.....	79,620	83,160
Milk, condensed.....	2,260,740	2,364,000	Tobacco.....	614,230	542,220
Pyrites.....	1,879,750	1,861,310	Wine.....	853,980	850,450
Wood, manufactures of:			Woolen goods.....	2,443,780	2,226,690
Lumber.....	9,777,520	7,647,220			
Pulp.....	11,977,380	10,999,390			

Shipping—Output of the Mines and Quarries.

Freight rates in foreign trade ruled high in 1911, the advance being particularly marked in the latter half of the year in outward freights. Bergen owns more and larger steamships than Christiania, but the latter port has more sailing vessels and its tonnage is the greatest in Norway.

The majority of the mines and quarries of Norway were either closed or only partly worked for two and one-half months in the summer of 1911, on account of labor troubles. The total production of pyrites and copper ore in 1911 was 350,000 metric tons (metric ton = 2,204.6 pounds), of which 316,254 tons was exported. The value of the pyrites mined is estimated at \$2,010,000, f. o. b. Norwegian port, and the copper is valued at \$469,000. The number of people employed in the copper and pyrite mines during the year was 4,000.

BERGEN.

[By Consul Bertil M. Rasmussen.]

Fish products continue to be the chief articles of export from Bergen, and constitute more than two-thirds of the entire exports to the United States. The sardine canning factories had an excellent season during 1911, as the supply of fish was plentiful during the

summer and fall. The market for Norwegian canned fish products is expanding, and the Fish Canners' Association is striving to keep up the quality and reputation of Norwegian sardines. They have endeavored to secure the enactment of laws prescribing the form of labels to be used and prohibiting the packing of winter catch.

Scarcity of rain at the proper time reduced the yield of agricultural products somewhat in this region during 1911. Of the three amts (counties) of this consular district, those of North and South Bergenhus showed shortages in the crops of barley, hay, oats, and potatoes, while in Romsdals Amt the hay crop was up to the average and the crops of potatoes and grain were above the normal amounts.

With the exception of a lockout in the shipbuilding trade in June, labor was well employed throughout 1911, and nearly all branches of industry had a fair year. There was great activity in house building, especially in the erection of 2-story houses accommodating two families. The "Typographical Quarter" deserves special mention. This consists of a number of small but modern houses in the Sandvigen district, built for the exclusive use of members of the typographical union. A new, modern school building, the completion of the new railroad station, and extensive harbor improvements made up the principal public improvements of the year at Bergen.

Prosperous Year in the Shipping Trade.

The stagnation of shipping rates that prevailed during recent years came to an end during 1911, causing a sharp advance in rates at the close of the year. The chief causes of the advance were the great increase in the world's commerce, the decrease in new tonnage, and the reluctance of shipping firms to renew expiring time charters. Early in 1911 the prevailing rates between the east coast of England and Bergen were \$0.97 to \$1.095 per ton and these later advanced to \$1.83 per ton. The advanced rates fell heaviest on coal and grain importers with unfilled contracts to carry out, based on freight rates of not over \$1.10. The Turko-Italian war caused little inconvenience at this port, but coal rates for Mediterranean points have been greatly advanced. Coastwise shipping as well as the over-sea trade between Bergen and Gottenborg, Stettin, Copenhagen, Hamburg, Rotterdam, Liverpool, Manchester, Swansea, Hull, and Newcastle had an exceptionally prosperous year, owing to large increases in both the passenger and freight traffic. At the close of 1911, the merchant fleet of Bergen consisted of 329 steamers of 257,564 net tons, and 76 sailing vessels, of 11,410 net tons. The number of vessels entered and cleared at Bergen during 1911 was 13,875, of 2,542,624 registered tons, of which 1,136 vessels, of 496,929 tons, were engaged in over-sea trade.

Results in the shipbuilding trade were better in 1911 than in the preceding year, notwithstanding the lockout during the summer that caused repair orders and several contracts for new tonnage to go to foreign firms. The recently organized Norwegian-American Line will undoubtedly fill a long-felt want by providing direct transportation between Bergen and New York. Two modern 12,000-ton vessels are now being built, and these will soon be followed by one or two more of the same type, enabling the line to maintain a weekly passen-

ger service between the two ports. One of the leading dailies of Christiania commented as follows concerning the new line:

Measures must first be adopted that will lead to a closer and firmer connection between commerce and industries on the one side and the shipping interests on the other, and arrangements made so that our imports and exports may be made direct, without having Denmark or Germany as middlemen. In order that the Norwegian-American line may be established securely and without delay, it must have a clear start. Arrangements must be made for fast trains to run alongside the first vessel that leaves Bergen for the United States, and the first passenger arriving here from New York must be enabled to step aboard a train that will speed him to any point in northern Europe without delay.

Imports of American Goods.

As the Norwegian customs statistics credit imports to the last direct shipping point, it is impossible to ascertain the actual volume of the imports of American goods into Norway, but the trade between the United States and this country shows a satisfactory increase from year to year. In the same manner, the export of fish products from this district is credited to the Netherlands, as the bulk of the fish products exported to the United States from here is transshipped at Rotterdam.

As usual, food products and feed stuffs constituted the bulk of the commerce between Norway and the United States during 1911, the imports of foodstuffs from the United States having been as follows, in pounds: Coffee, 27,336; flour, 8,210,429; lard, 473,878; meat, 77,585; oleomargarine, 1,375,325; pork, 179,319; sirups, 5,762,116; and sugar, 26,093.

Other American products imported in considerable quantities at this port were: Cash registers, cotton, cottonseed oil, fresh and dried fruits, farm machinery, iron and steel beams, leather, motors, paint, petroleum, mowing machines, typewriters, sewing machines, rubber goods, and wire, but no statement of the quantity or value of such imports is available.

Textiles and textile fabrics are supplied almost exclusively by English and German houses, which have the advantage of proximity. Their commercial representatives canvass the market regularly and thoroughly, studying the needs and conditions, enabling them to meet the requirements of every section.

Consular Assistance for American Exporters.

This consulate received more commercial inquiries in 1911 than any previous year, the great majority of them in quest of information concerning new markets. The articles receiving most attention and concerning which inquiries were most frequent, were: Apples, adding machines, automobiles, clothing (ready-made), furniture, hardware, marine motors, motor boats, musical instruments, safety razors, salt, shoes, spectacles, sirups, and tools.

The information communicated to the inquirers, by letter or through commercial reports, did not always lead to results, nor was it always possible to fully comply with requests made; but many of them have been acknowledged as having contained information of practical value, and in not a few instances direct results were obtained.

Considerable time and attention have been devoted in the past to investigating the prospects for a market in this district for American

automobiles, and the conclusion was reached that conditions were favorable providing American manufacturers would grant as liberal terms to agents as European houses do. Many attempts were made to induce some American firms to do this, but without success; they clung tenaciously to the old method of conducting their foreign business by giving a general agency for this or that country, and sometimes for the whole of Europe, to some syndicate at Hamburg, Copenhagen, Rotterdam, or elsewhere.

To illustrate the result that such arrangements often lead to, it is only necessary to relate a case that recently occurred in this district. A certain automobile company requested this consulate to "recommend some reliable dealer in your territory whom you consider competent to handle our product." A competent man was found and his name was sent to the company, and was accepted as the local agent. A short time thereafter the agent reported to the company that he had secured contracts for the sale of three cars. He then received a letter from the company stating that the general agency for Denmark, Norway and Sweden had in the meantime been given to a firm at a certain European port, and that henceforth he would be under the jurisdiction of these general agents. The matter was then taken up with the general agents, who instead of making the same price and terms, added their commission of about \$50 to the original price, at which price the sale could not be made and was consequently annulled.

General Imports and Exports—Exports to the United States.

The following table shows the values of the principal imports and exports at Bergen during 1909 and 1910, the latest years for which statistics have been made public:

Articles.	Imports.		Exports.	
	1909	1910	1909	1910
Dry goods.....	\$813,056	\$901,927	\$40,494	\$54,618
Dyestuffs.....	178,840	186,742	28,055	42,268
Food products, animal.....	280,194	261,622	5,248,672	5,750,181
Fruits and vegetables.....	282,338	297,534	10,076	28,247
Grain.....	5,605,434	5,714,912	403,742	234,205
Hair, hides, etc., and manufactures of.....	663,273	723,680	1,254,319	1,482,094
Groceries.....	1,342,733	1,601,005		
Metals, and manufactures of.....	1,040,223	1,389,794	321,780	203,144
Minerals, and manufactures of.....	1,307,982	1,358,224	398,355	483,567
Paper.....	40,736	51,751	29,614	29,507
Ships, machinery, etc.....	1,397,328	1,243,038	51,965	192,183
Spirits.....	216,674	233,642	9,299	10,693
Tallow, oils, fats, and manufactures of.....	1,277,038	1,619,149	635,133	716,905
Textiles.....	964,960	1,062,379	34,036	29,989
Wooden articles.....	117,571	95,676	8,093	22,106
Yarn and thread.....	489,314	609,164	7,691	14,956
All other articles.....	213,576	210,246	21,384	31,439
Total.....	16,225,320	17,560,485	8,502,688	9,325,802

Of the imports from the United States during 1910 oleomargarine showed an increase of \$4,127 over the preceding year, cotton \$31,222, machinery \$55,476, and sirups \$117,089. The imports of American meat decreased \$12,094.

The total exports from this consular district to the United States during 1911 were valued at \$1,358,115, against \$1,341,479 in the preceding year. Large increases were shown in the shipments of

furs, cod liver oil, and hides and skins, while considerable decreases were noted in cheese, mackerel, aluminum, dried fish, and sardines.

The decreases in the shipments of dried fish and mackerel were due to the high prices which prevailed for these products, but the great falling off in the exportation of sardines is difficult to explain, in view of the fact that the shipments from other Norwegian ports to the United States show large increases. The following table gives the value of the principal exports to the United States during 1910 and 1911, according to the invoices declared at this consulate:

Articles.	1910	1911	Articles.	1910	1911
Aluminum.....	\$68,695	\$42,037	Flour, herring.....		\$14,878
Cheese.....	23,061	15,882	Furs.....	\$273	4,878
Fish:			Hides and skins.....	372,162	460,941
Anchovies.....	6,759	7,741	Oils:		
Canned.....	11,026	16,540	Cod-liver.....	141,276	195,407
Cod.....	7,698	5,217	Lubricating.....	1,132	1,840
Dried.....	250,458	208,825	Peanut.....		4,173
Herring—			Paint.....		2,100
Salted.....	148,614	174,675	Tow.....		1,468
Smoked.....	182	1,029	All other articles.....	5,775	2,338
Mackerel.....	106,544	86,688	Total.....	1,341,479	1,358,115
Sardines.....	197,824	114,458			

The exports from Bergen to the Philippines consisted entirely of codfish, of which 19 tons, valued at \$2,679, were shipped in 1910 and 12.5 tons, valued at \$2,008, in 1911. There were no shipments to the other insular possessions of the United States.

CHRISTIANIA.

[By Vice Consul General Haakon E. Dahr, Jr.]

Owing to its favorable location, excellent communications with other parts of Norway and with the principal cities of foreign countries, and the enterprise of its citizens, Christiania maintains its place as the commercial center of Norway. The population of the city at the beginning of 1911 was 244,424.

The principal imports, and the amounts or values thereof from the United States, were as follows in 1911 (ton=2,240 pounds):

Articles.	Total.	From United States.	Articles.	Total.	From United States.
Automobiles and motors, value.....	\$290,020	\$67,704	Machines and machinery—Continued.		
Breadstuffs.....tons..	36,391	13,420	Sewing and knitting machines.....value..	\$162,863	\$21,520
Cotton.....do.....	2,844	608	Oils:		
Cottonseed meal, etc.....do..	24,522	7,359	Cottonseed.....tons..	2,622	2,477
Fruit.....do.....	770	447	Petroleum.....do.....	31,373	21,493
Iron tubing.....do.....	6,149	1,021	Provisions.....do.....	6,321	4,406
Machines and machinery:			Tobacco.....do.....	1,254	625
Agricultural machinery, value.....	\$106,947	\$59,825	Tools.....value.....	\$338,277	\$105,535
Typewriters, cash registers, and adding machines.....value..	\$112,005	\$95,085	Wire and wire rope.....tons..	6,102	763

The leading items of export from Christiania in 1911 were as follows, in tons: Hides, 1,559; matches, 4,394; paper, 19,567; wood flour, 3,231; wood pulp, 103,000.

Shipping—Homes for Laborers—Industries.

The merchant marine of Christiania consists of 328 steamships of 361,587 gross tons, 6 motor ships of 311 gross tons, and 59 sailing vessels of 65,237 gross tons. The arrivals in 1911 numbered 1,777 steamers of 1,400,178 tons, and 575 sailing ships of 85,655 tons.

During 1911, Christiania was visited by 1,771 foreign salesmen, representing the following countries: Germany, 883; Denmark, 350; Great Britain, 177; Sweden, 145; France, 78; Netherlands, 49; Austria, 43; all other countries, 46.

On account of the stringent building laws, tenements of 1 to 3 rooms and kitchen are hard to obtain. The city is now willing to guarantee mortgages amounting to 75 per cent of the construction costs to further the building of tenements for workmen, but even these arrangements have not provided sufficient lodgings and it has been necessary to build wooden barracks to meet the immediate needs.

The industries of Christiania are classified as follows:

Industry.	Plants.	Employees.	Industry.	Plants.	Employees.
Machine shops, including two shipyards.....	162	7,792	Wood manufactures.....	86	1,566
Chemicals, paints, and dye-stuffs.....	23	738	Food products.....	123	3,735
Electric apparatus, etc.....	19	80	Clothing.....	61	2,515
Textiles.....	23	2,554	Stone, monuments, etc.....	11	187
Paper, etc.....	31	1,052	All others.....	88	2,075
Leather and rubber.....	18	313	Total.....	645	22,607

Exports to the United States.

The values of the principal exports from this consular district to the United States during 1910 and 1911, as declared at the Christiania consulate and the consular agencies, are shown in the following table:

Articles.	1910	1911	Articles.	1910	1911
CHRISTIANIA.			CHRISTIANSAND.		
Acid, oxalic.....	\$24,660	\$55,338	Aluminum.....	\$147,546	\$21,454
Books.....	12,547	23,404	Fish:		
Ferrosilicon.....	20,277	9,760	Salted mackerel.....	485,704	462,952
Fish.....	2,648	20,949	Other.....	4,277	6,165
Fishhooks.....	10,958	23,187	Wood pulp.....	19,288	.....
Glue stock.....	10,748	10,689	All other articles.....	508	3,780
Fertilizer.....	54,381	130,984	Total.....	657,323	494,351
Hides and skins.....	302,952	740,999			
Household goods.....	5,162	5,540	TRONDHJEM.		
Machinery.....	6,931	4,043	Brandy.....	13,883	11,721
Matches.....	84,038	114,366	Fish.....	29,121	48,372
Minerals.....	6,824	6,052	Oil, cod-liver.....	1,021	1,829
Oil, cod-liver.....	19,947	61,747	Paper.....	119,506	99,831
Paper.....	217,866	173,458	Wood pulp.....	81,305	102,928
Provisions: Cheese.....	21,530	25,051	All other articles.....	2,411	2,785
Rags.....	5,393	8,414	Total.....	247,847	267,466
Rope, old.....	22,294	22,170	Grand total.....	4,107,163	5,578,403
Rubber, old.....	30,946	32,824			
Wood flour.....	7,323	18,789			
Wood pulp.....	2,309,908	3,302,767			
All other articles.....	24,660	26,045			
Total.....	3,201,993	4,816,586			

The exports to the insular possessions of the United States from this consular district in both 1910 and 1911 consisted entirely of condensed milk, the values being as follows: To the Philippines,

\$44,209 in 1910 and \$85,737 in 1911; to Hawaii, \$184 in 1910 and \$819 in 1911; to Porto Rico, none in 1910 and \$127 in 1911.

Trade at Christiansand Agency.

Business at Christiansand was generally better in 1911 than in the preceding year, especially on account of the higher freights obtained by the shipping trade. Most of the fishing interests received good returns, with average yields and good prices. The crop returns for the year were less than the average, but the quality of most of the products was very good. The fruit crop was large and better than last year's in both quantity and quality.

The prices of sawn wood were about the same as in 1910, props and sleepers showing some increase. Low water in the rivers made it difficult to get the wood down to the coast, and the exports fell off somewhat. Wood-pulp prices were low at the beginning of the year, but rose during the latter half of the year to top prices, on account of low water in the rivers and the lockout in the trade. Paper prices were generally low. The number of emigrants leaving here for America during 1911 was 2,325, of whom 2,302 went to the United States.

The principal imports into and exports from Christiansand during 1911 are shown in the following table:

Articles.	Quantity.	Articles.	Quantity.
IMPORTS.		EXPORTS.	
Breadstuffs:	<i>Pounds.</i>	Aluminum.....	<i>Pounds.</i>
Barley.....	3,105,074	Canned goods.....	3,046,281
Meal, wheat.....	7,997,865	Copper, pure.....	29,897
Rye and rye meal.....	23,409,994	Copper-nickel stone.....	170,181
Coffee.....	784,467	Electrosteel.....	123,459
Cotton goods.....	375,507	Fish:	205,222
Fruits.....	791,018	Herring—	
Grease and tallow.....	450,779	Iced.....	3,390,460
Hides and skins.....	1,642,333	Salted.....	12,845
Meats.....	541,636	Iced.....	377,361
Oils:		Lobsters, fresh.....	2,515,126
Petroleum.....	135,919	Mackerel—	
Other.....	779,252	Iced.....	2,968,313
Potatoes.....	817,632	Salted.....	120,488
Rice.....	315,060	Game.....	193,327
Sirup.....	473,478	Nickel, pure.....	1,156,880
Soda.....	1,532,213	Paper.....	13,529,197
Sugar.....	2,479,089	Pasteboard.....	2,041,431
Tobacco, leaf.....	344,933	Salt peter.....	1,930,543
Wines.....	364,331	Wood pulp.....	9,369,104

¹ Barrels.

² Number.

Commercial Review of Trondhjem.

The grain crop in the vicinity of Trondhjem in 1911 was somewhat below the average. The hay crop was much above normal and large quantities of hay were shipped to other places, especially to southern Norway. The cod and herring fisheries of the surrounding districts and of northern Norway were rich and very satisfactory to the fishermen, who now provide their boats with motors. The number of emigrants from this port dropped from 7,132 in 1910 to 4,768 in 1911. The principal articles of import during 1911 at Trondhjem, in pounds or value, were as follows: Bacon, 86,829; coffee, 34,544; flour (wheat), 7,815,408; fruit, 98,767; grits (oats), 255,427; lard, 78,595; machines and parts, \$8,650; margarin, 545,463; molasses, 4,140,489; motors, \$9,800; oils, 727,790; and pork, 15,26,079.

STAVANGER.

[By Consul P. Emerson Taylor.]

Commercially 1911 was a prosperous year for the Stavanger consular district, more for the shipping interests and the fishing industry, however, than for the agricultural and dairy interests. This consular district embraces Stavanger Amt (county), in southwest Norway, and has a population of 140,700, with seven cities of over 1,000 population. Aside from the small fertile plain of Jaederen, which is one of the best agricultural sections of Norway, the district is mostly mountainous, with many islands on the west coast and many fjords extending far up into the mountains and presenting some of the most picturesque scenery in Europe.

There is but little timber in the district and no coal, iron, or other mineral resources in workable quantities. There are no large manufacturing industries except the fish canneries, of which there are 45 in the district, 35 being at Stavanger and 6 at Haugesund. There are also canneries at Flekkefjord, Kopervik, Egersund, and Skudenaeshavn.

Recent Development of Stavanger.

Until a few years ago Stavanger was in many respects a city of the eighteenth century. Its streets are yet narrow and crooked, many of them wide enough for only the single driveway of cobblestones, without sidewalks; its shops and stores are generally small, and hand-made goods still constitute a large part of the stocks of many of them. The houses are generally of wood and almost all are old. The great growth of the city in commercial importance in the past 10 years, owing to the development of the fish-canning industry, has in many ways begun to modernize the city and is constantly opening new markets for American goods. The city now has a splendid municipal electric light and power plant, which lights the city and its homes at a low rate and sells its surplus power to the fish factories. A municipal gas plant, a slaughterhouse, employment bureaus, and public bathhouses are maintained by the city, and during 1911 the city council took the initial steps to widen and straighten some of the principal streets sufficiently to permit the installation of a street car system in the near future.

With the exception of a few of the finer homes recently built the houses of Stavanger are not equipped with baths or furnaces. Experiments are now being made with a view to installing a municipal electric-heating system for the entire city by enlarging and extending the municipal power plant. This plant has abundant power available from its waterfalls, but the economic phases of the long transmission of the power have not yet been sufficiently worked out to make the project a certainty.

With the remarkable industrial prosperity of Stavanger during the past three years building operations have been extensive. There were 202 new houses built in 1910 and 238 in 1911, and the assessed valuation of city property in 1911 showed an increase of 53 per cent over that of the preceding year. The progressive modern spirit is seen by the invasion of the automobile in spite of the narrow streets. While three years ago there were none in the city, in 1911 there were 15. The latter year first witnessed the display of electric signs in large numbers.

Many of the best homes erected during 1910 and 1911 are thoroughly modern, and the city's new post office, municipal, and public school buildings are all modern in construction and furnishings.

American Goods Popular—Agricultural Conditions.

One of the most noticeable evidences of this modern spirit is the remarkable increase in the sales and exhibits of American goods in the leading stores of the city. Two years ago this consulate endeavored to increase the interest in American goods by loaning to leading merchants American catalogues from the catalogue files, which were never visited by the merchants. The vice consul now delivers the catalogues and personally calls attention to goods attractively shown in the particular line, and the results attained have been most encouraging.

In these two years there has been a remarkable extension of the exhibits of American goods of nearly all kinds in the larger store windows. Quarter-page advertisements of American typewriters, sewing machines, motors, and farm machinery now frequently appear in the local papers, while hundreds of smaller American articles are on sale in all the leading stores.

The past year was less prosperous for the farmers than for any other class in the community, although the farming and dairying interests so overlap that the shortage of farm crops also affected the dairy interests to some extent. Owing to a dry and rather warm summer the yield of all farm crops for 1911 was below that for 1910. The fruit crop, however, especially apples and berries, was exceptionally good. The loss to the farmers on account of the falling off in the hay crop was especially heavy.

The hay and potato crops together constitute five-sixths of the total value of all farm crops in the district. The Government reports the yields and values of the farm crops of this district in 1910 and 1911 as follows:

Crop.	1910		1911	
	Quantity.	Value.	Quantity.	Value.
Wheat.....bushels..	851	\$1,286	805	\$1,152
Rye.....do.....	4,794	4,502	4,139	3,457
Barley.....do.....	57,188	45,667	51,633	39,502
Oats.....do.....	779,662	504,429	518,501	473,716
Other grain.....do.....	3,104	2,465	2,667	2,510
Potatoes.....do.....	1,673,250	778,701	1,563,046	601,632
Hay.....tons.....	537,236	2,266,737	427,683	1,620,467
Total.....		3,623,787		2,942,477

Dairies—Prosperous Year for Shipping.

The 35 creameries in this consular district used 34,650,000 quarts of milk during 1911. Statistics as to their output are not obtainable. The farmers received 2.8 to 3 cents per quart for the milk, an advance of about one-fourth cent over 1910. A dairy school is conducted in the district by the Government. There are 6 margarin factories in the district, with an annual output of about 7,700,000 pounds.

Shipping rates were high and all the lines report good business throughout 1911. The new lines to Hamburg and to Liverpool and

Swansea, which were started in 1910, did good business and the latter line bought two new ships to care for its increased trade. In November, 1911, the Norwegian-Mexican Gulf Line announced that in December its ships would also call at New York and Philadelphia, as well as at Newport News and the Gulf ports, but later revoked this decision. Plans were made for direct communication with Bordeaux and other French ports after April 1, 1912. The opening of the new Norwegian-American line, giving this city direct communication with New York, will do much toward increasing trade with the United States. The only direct connection with United States ports at present is with New Orleans, Galveston, and Newport News. The ships entering Stavanger in 1911 numbered 1,904 steamers, of 986,053 tons, and 140 sailing vessels, of 20,562 tons, against 1,726 steam and 160 sailing ships in 1910. Stavanger owned vessels of over 50 tons numbered 115, of 64,016 tons, in 1911, against 111, of 52,678 tons, in 1910.

Fish-Canning Industries.

Fishing is the chief industry of this district, and more than 6,000 persons are employed in catching fish, while about the same number are employed in the fish canneries. It would be difficult to estimate the number indirectly dependent for a living upon the prosperity of this industry. The money supply comes from the heavy fish exports, and the banks, merchants, and business men generally are beneficiaries of the increasing exports.

All the fish-canning companies were prosperous during 1911, and several new factories were erected. The combined output of the 45 factories of the district is estimated at 95,000,000 to 100,000,000 cans, the largest plant having an annual output of over 20,000,000 cans. The sardine pack exceeds the output of all the other kinds of fish products combined, and the Norwegian sardines have invaded practically every market in the world. The United States takes the largest share of these exports, and the American shipments from Stavanger in 1911 showed an increase of \$200,000 over the preceding year, while the exports of a number of other fish products fell off. The quantities and values of the total catches of sprats and herring in 1910 and 1911 are shown in the following table:

Variety.	1910		1911	
	Quantity.	Value.	Quantity.	Value.
Sprats.....quarts.....	11,339,790	\$203,409	13,490,620	\$407,427
Herring.....do.....	2,041,990	19,895	4,885,168	41,702
Mixed.....do.....	188,540	2,619	308,330	3,923

The average prices received by the fishermen in 1911, per 22 quarts, were 68 cents for sprats, 18.7 cents for herring, and 30.5 cents for mixed sprats and herring. Of the 1911 catch of sprats, 11,987,910 quarts were smoked (sardines), and 1,010,460 quarts were spiced (anchovies, etc.). Of the herring, 3,677,410 quarts were smoked, 325,600 quarts spiced, 334,290 quarts marinated, and 339,570 quarts salted. The mixed fish were all smoked.

General Industrial Conditions.

The prosperity of the fish canneries extended to the allied industries. These include box making, can making, key making, and label printing plants, a nail factory, and a fish oil, meal, and guano factory. Prices were good for all fish products, but there was a considerable falling off in the mackerel trade. Good prices enabled the factories to keep their employees at steady work and at advancing wages. There were no strikes of any consequence. Bank deposits increased 11 per cent.

The shipbuilding yards built two new steamers and have orders for four more for construction during 1912. Other manufacturing plants of the district include a woolen and textile factory, a brickmaking plant, two dry-milk factories, a soap factory, a combined brewery and flour mill, an earthenware factory, and electric steel works. These plants, except the latter, which is not yet fully completed, all increased their outputs over those of 1910 and report a prosperous year. The following new plants have been built during the year: Six new fish-canning factories, a casein factory, a tin factory, and a shot factory. The two large woolen mills of the district have consolidated and erected one of the largest mills in Norway just outside the city.

Increased Trade with the United States.

As nearly all American goods imported into Stavanger, except those coming from the Gulf ports, are transshipped at foreign ports and are not credited to the United States in the customhouse statistics, no entirely accurate statement can be made of the imports from the United States, but there are many evidences of a large increase.

The leading merchants now keep regularly in stock American machines and American goods of many kinds that were formerly ordered only on demand. Since the middle of 1910 six leading shoe stores have begun carrying stocks of American shoes. American sewing machines, typewriters, safety razors, washing machines, toilet articles, and many other articles of general utility, as well as farm machinery of nearly all kinds, are now regularly on exhibition in the largest stores and are finding an increasing sale. The American automobile made its first appearance in 1911. Many American marine motors are sold.

The lack of direct steamship connection between this port and the chief Atlantic ports in the United States has been a great drawback. It necessitates the delay and additional expense incident to transshipment from another European port; and it often occasions the making of purchases through some Continental general agent. This prevents that direct business intercourse between buyer and seller, and the acquaintance with and understanding of each other that do much to promote and maintain permanent and satisfactory business relations.

The absence of American traveling salesmen in this territory, leaving the field to the large numbers of English and German salesmen who are here each week, also tends to turn the importer away from American firms. These two adverse phases of the situation are the chief causes of the third difficulty most American firms encounter in trying to enter this market, namely, almost total ignorance of the

requirements of the market, of credits, of the commercial standing of the importers, of the tastes and temperament of the buyers, and of the language and commercial customs of the market. These are subjects constantly studied by, and thoroughly familiar to, the English and German competitors of the American firms. Their salesmen cover the territory regularly and thoroughly, speak the language of the people, and know their buyers personally and are acquainted with the commercial usages of the market.

Sales Limited by Character of the Market.

Perhaps the chief drawback, however, to the more rapid introduction of American goods lies in the nature of the market itself. The wage scale and general standard of living are vastly different from the standard of wages and living in the United States, and do not admit of the purchase by the wage earner here of many of the articles regarded in the United States only as necessities, but here as distinct luxuries. This is true of nearly all the labor-saving kitchen devices, high-grade furniture for both office and home, all bathroom and other modern fixtures for the home, and many of the daintier American foods, especially breakfast foods. These are things regarded here as solely for the few who constitute the wealthy class. Americans who can not understand the high cost of living and the extremely low wage scale in many parts of Europe overlook the fact that here an entirely different standard of life exists for the wage earner, and luxuries have as yet had small place in the home and life of the Norwegian wage earner. Industry, frugality, and self-denial characterize the Norwegian laborer, and he is limited in his purchases to the cheapest goods, largely the handmade goods of his own and neighboring European countries.

While the thousands of returning Norwegian-Americans, with their more extravagant tastes and most of them with more money, tend to increase the demands of the community for better goods and more luxuries, yet the prices of nearly all commodities have advanced more rapidly than the wage scale, and this has tended to check increasing purchases of the luxuries. But even the slight advances in wages, the influx of machine-made goods, the increasing knowledge of labor-saving devices, and the increasing longing for moderate-priced luxuries are gradually fixing new standards of living and opening new markets for American goods, in spite of higher prices. Notwithstanding its adverse features, therefore, this market offers an inviting field to the American exporter. The rapid growth of the manufacturing industry, resulting in modernizing the city in many ways, has greatly stimulated the purchases of American electrical appliances, modern office and factory devices and machines, and the smaller types of modern farm machinery. For the American manufacturer who will take the trouble to investigate the needs of the market, and then meet its requirements, the outlook for the future in this district is distinctly encouraging. The growing conviction of the superiority in appearance and quality of American goods is slowly but surely giving them the lead.

General Imports and Exports.

The principal increases in the imports into Stavanger were in food-stuffs and tin plate, due to the underproduction of farm crops in the

district in 1911 and the growth in the canned sardine business. Decreases were shown by barrel hoops, cement, and potatoes. The falling off in the importation of cement was due to the purchase of nearly all the cement used here in 1911 from the new cement plant at Christiania, while in former years all the cement was imported. The following table shows a comparison of the principal imports and exports at Stavanger during 1910 and 1911.

Articles.	1910	1911	Articles.	1910	1911
IMPORTS.			IMPORTS—continued.		
Bark extract.....pounds.	111,778	99,273	Tobacco and cigars.pounds.	135,852	87,963
Barrel hoops.....number.	1,262,750	817,645	Vegetables.....do.	1,955,190	2,274,201
Breadstuffs:			White lead.....do.	212,223	257,017
Barley.....pounds.	25,965,925	20,624,320	Wine and brandy.....do.	370,669	356,609
Corn.....do.	1,823,138	3,007,404	Wool, and manufactures of:		
Flour—			Raw.....pounds.	718,267	620,564
Rye.....do.	3,191,650	2,018,104	Fabrics.....do.	108,132	95,464
Wheat.....do.	6,222,821	6,640,984	Yarn.....do.	211,130	233,373
Rye.....do.	10,208,095	13,540,164	Zinc.....do.	111,894	134,463
Cement.....do.	2,170,012	273,891			
Coffee.....do.	1,492,867	1,619,583	EXPORTS.		
Cotton, and manufactures of:			Barrels and kegs.....number.	34,539	22,644
Raw.....pounds.	32,144	42,134	Berries.....pounds.	159,298	247,237
Fabrics.....do.	217,068	204,226	Clothes pins.....do.	206,661	267,012
Yarn.....do.	38,425	40,007	Fertilizers.....do.	878,130	2,154,095
Feed stuffs.....do.	7,338,723	5,494,771	Feed stuffs.....do.	6,139,573	8,380,950
Fertilizers.....do.	8,200,535	9,754,030	Fish and fish products:		
Fire brick.....do.	237,882	466,508	Anchovies.....barrels.	13,371	13,634
Fruit.....do.	1,451,340	1,520,011	Canned.....pounds.	29,660,910	33,967,589
Hemp, and manufactures of.....pounds.	326,869	289,465	Fresh.....do.	208,045	271,038
Hides.....do.	185,035	244,827	Herring, fresh and salted.....barrels.	40,960	38,222
Iron and steel, and manufactures of:			Smoked.....pounds.	443,606	847,433
Anchors.....pounds.	135,615	152,599	Sprats.....barrels.	3,304	3,050
Bars and piping.....do.	2,759,599	3,921,104	Stockfish.....pounds.	74,580	12,144
Hardware.....do.	155,526	288,169	Lobsters.....number.	248,463	210,654
Machinery and tools, value.....	\$128,826	\$134,961	Mackerel.....barrels.	18,964	10,715
Pig Iron.....pounds.	1,381,306	1,709,844	Salmon.....pounds.	103,233	93,443
Wire.....do.	3,789,456	3,531,339	Shrimp.....do.	196,255	136,656
Leather.....do.	31,865	37,767	Hides.....do.	121,750	242,757
Oils:			Kieselguhr, dolomite, and stone.....tons.	926	993
Olive.....do.	2,809,125	2,742,192	Machinery.....value.	\$22,801	\$20,549
Petroleum.....do.	158,415	1,125,186	Metal, old.....pounds.	6,246,253	4,436,399
Other.....do.	2,153,571	2,654,476	Oil, fish.....barrels.	5,061	7,829
Potash.....do.	97,891	75,442	Provisions:		
Potatoes.....bushels.	3,879,493	1,132,270	Butter.....pounds.	608,723	899,430
Provisions:			Cheese.....do.	51,922	55,462
Cheese.....pounds.	10,450	13,374	Margarin.....do.	97,810	128,707
Lard, etc.....do.	1,022,243	1,300,937	Milk, dry.....do.	170,550	594,975
Margarin.....do.	2,812,073	2,650,256	Poultry and game, pounds.	50,545	97,637
Meat.....do.	677,516	664,855	Rope.....pounds.	31,284	20,595
Raisins.....do.	330,876	281,734	Seaweed ashes.....tons.	1,806	1,693
Sirup.....do.	1,846,884	2,061,563	Tin clippings.....pounds.	227,423	1,775,093
Soda.....do.	554,393	538,745	Tinware.....do.	252,980	184,836
Spices.....do.	117,110	118,653	Tar.....do.	803,044	546,218
Stoneware and glassware, pounds.	80,747	106,368	Vegetables.....do.	75,258	12,712
Sugar.....pounds.	3,923,790	4,523,537	Wool, and manufactures of.....pounds.	59,099	46,746
Tin plate.....do.	23,119,056	26,479,592			

Exports to the United States.

The exports to the United States in 1911 from Stavanger showed a slight increase over those of 1910. Large increases were made by sardines, herring in oil, and fertilizer, with declines in many of the other fish products. The fish exports go to many ports of the United States, on the Atlantic, Pacific, Gulf, and Great Lakes. The fertilizer is chiefly whale and fish guano and meal, and goes to the South Atlantic and Gulf ports. The values of the principal exports to the

United States during 1910 and 1911, according to the invoices declared at this consulate, are shown in the following table:

Articles.	1910	1911	Articles.	1910	1911
Fertilizer.....	\$46,091	\$105,407	Fish and fish products—Con.		
Fish and fish products:			Mackerel.....	\$307,890	\$180,164
Anchovies.....	47,340	38,796	Sardines, canned.....	934,657	1,048,531
Appetitsild.....	9,794	12,615	Sardelrings.....	2,057	1,192
Canned.....	11,876	2,295	Provisions:		
Crab.....	2,408	2,982	Cheese.....	2,831	3,473
Fish balls.....	93,348	67,162	Game.....	1,996	1,116
Gaffelbiter.....	2,483	5,455	Meat.....	8,190	6,912
Herring—			All other articles.....	3,705	6,416
In oil, etc.....	160,320	226,051			
Salted and smoked	77,716	66,577	Total.....	1,712,702	1,775,144

The exports to Hawaii rose from \$140 in 1910 to \$1,850 in 1911, being made up entirely of canned fish in both years. Canned fish to the value of \$2 was shipped to the Philippines and \$295 to Porto Rico during 1911.

WATERPROOF CLOTHING FOR ARGENTINE NAVY.

[From Lieut. Commander R. W. McNeely, Naval Attaché of the American Legation at Buenos Aires; transmitted by Consul General R. M. Bartleman, Buenos Aires.]

While the Minister of Marine of the Argentine Navy will be pleased to receive, at any time, information in regard to waterproof material, it is not customary for him to deal directly with manufacturers or agents when a contract is to be let. When supplies of this nature are needed for the Argentine Navy, the Minister of Marine sends specifications to the Chiefs of the Argentine Naval Commissions in the United States and in Europe, and directs them to purchase the amounts desired. It seems, therefore, that the most satisfactory method would be for American firms to confer with the Chief of the Argentine Naval Commission in the United States [whose address may be obtained from the Bureau of Manufactures].

The chief of staff has furnished the following specifications of waterproof clothing used by the enlisted personnel of the Argentine Navy, and a free-hand sketch [which latter will be loaned by the Bureau of Manufactures]:

Coat.—Black waxed, doubled, with stiff or straight collar 5 centimeters (1.9685 inches) high, lined with felt; fitted with two rows, each one with three black bone buttons, the left ones outside or visible, and the right-hand ones covered by the lapel; large enough to wear over an overcoat, and it must not go beyond the waistline over 20 centimeters (7.874 inches).

Trousers.—Black, waxed, wide, without buttons, and with a draw string in the waistband..

Southwester.—Waxed, black, lined with linen or canvas, the crown to be in the form of a spherical cap with circular brim, with felt-lined ear flaps fitted with chin bands.

Phosphate-rock production.—The Geological Survey reports a considerable increase in production of phosphate rock in the United States during 1911, when the total marketed output was 3,053,279 long tons, valued at \$11,900,693, as compared with 2,654,988 tons, valued at \$10,917,000, in 1910. During 1911 there were exported from the United States 1,246,577 long tons of phosphate rock, valued at \$9,235,388, in contrast to 1,083,037 tons, value \$8,234,276, in 1910.

TASMANIAN APPLE TRADE EXPANDING.

[From Consul Henry D. Baker, Hobart.]

Exports of fruit from Tasmania this season have exceeded any previous records, the total quantity of apples and pears up to the end of April, 1912, aggregating 945,104 bushel cases. The amount sent away during the previous season up to the end of April numbered 798,674 bushel cases. There will yet be a considerable number of apples shipped from here to the Sydney market, but for the English and Continental markets the season has closed. During the present season 21 special steamers have called and two vessels have taken fruit to South America. The quantity shipped to the United Kingdom to date (Apr. 30) is 638,340 bushel cases, which, compared with the figures for the corresponding period of 1911, is in excess by 106,839 cases.

The Tasmanian Mail, published at Hobart, gives some idea of the magnitude of the Tasmanian fruit business by mentioning that the number of bushels of apples and other fruit produced in Tasmania this season would, if placed in line, reach from Hobart almost to Sydney, a distance of 623 miles, and would form a 6-foot wall of 130 miles from Hobart to Launceston, while the weight of the case-making material must exceed 10,000 tons. The rapid growth of the fruit-shipping business is shown by the fact that during 1901 the number of bushel cases shipped was 218,546; in 1908 it had risen to 487,967, while this season it is up to nearly 1,000,000, with promise of a much larger increase next year. There are at present 20,412 acres devoted to orchards in Tasmania. The Tasmanian Mail states that it will not be long before there are 30,000 acres of apple orchards in this State, and if this area only averages a yield of 100 bushels to the acre the result will be 3,000,000 bushels annually.

The Apple Districts—Excellent Profits.

At present the southern part of Tasmania contains the leading fruit district, most of the apples being grown in the valleys of two parallel rivers, about 30 miles apart—the Derwent River, at the mouth of which is Hobart Harbor, and the Huon River. Both rivers are navigable about 30 miles from the sea, and so permit easy transportation of the fruit to Hobart, where ships up to 13,000 tons can berth at the wharves and load with this fruit for all parts of the world. A new apple district is fast developing in Tamar River Valley, northern Tasmania, and also some large and successful orchards have lately been established near the eastern coast. Apple growing in Tasmania flourishes most in country too poor and rough for general agriculture; the richest soils are said to be undesirable for apple growing, as they cause too much growth of wood instead of fruit. As apple growing even on a small acreage yields good returns, there is now active demand for land suitable for orchards. Not only is apple growing being taken up by new settlers in Tasmania, but also many retired naval and military men, doctors, lawyers, and business men have been planting orchards on the slopes above the three leading rivers. It is not uncommon to hear of net profits of \$100 to \$150 per acre from these orchards; in fact, the latter figure is about the average return in Tasmania from a well-managed orchard in full bearing.

The cost of starting orchards here is about as follows: Crown land can be obtained from the Government for about \$2.40 per acre. The cost of fencing will amount to about \$2.13 per chain (66 feet); clearing the land varies from \$25 to \$100 per acre; plowing \$4 to \$5 per acre; trees cost about \$17 per 100; planting \$4 per acre, and cost of cultivation on small areas \$5 per acre yearly; also two horses and implements would cost about \$300 more. A well-managed Tasmanian orchard begins to give returns the fifth year after planting. Orchard property may be purchased here from \$300 per acre when three years old up to \$1,000 per acre for trees in full bearing.

Packing and Grading on the American System.

The cases used in the export of Tasmanian apples measure internally 18 by 8½ by 14 inches, have a capacity of a trifle over a bushel, and go about 23 to the ton of shipping space. The apples after being put through locally made grading machines are each wrapped separately in paper mostly imported from Sweden. Since the 1st of January all the imported paper for wrapping fruit has been admitted into the Commonwealth of Australia free of duty. Most of the packers utilize a thin layer of wood wool at the bottom of the case and place another upon the top. This being somewhat elastic, allows for any shrinkage in the fruit, and therefore to a great extent prevents the contents from becoming loose and consequently injured through movement. The pears are wrapped individually in tissue paper and embedded in wood wool so that each pear is separate. In no case does the outside wood come in contact with the fruit. Pears are now shipped in trays made in two sizes—26 by 12½ by 3½ inches, and 23½ by 13½ by 3½ inches. Another tray measures 20 by 15 by 3 inches. In each instance the trays are cleated together to form one package. There is usually plenty of timber suitable for cases in the vicinity of the orchard, various species of eucalyptus furnishing the wood used. An American fruit-packing expert from Seattle (Mr. Samson) has lately been in Australia giving demonstrations of the American system (or that followed in the North Pacific States) of packing apples, and he has just been invited by the Tasmanian Fruit-growers' Union to give demonstrations in Tasmania. Mr. Samson has shown Australian apple growers that by using the American-shaped cases of about equal cubic capacity with their own, not so high, but wider, packing can be done not only in less time on account of greater convenience, but also more apples can be packed to the same cubic capacity and with less chance of bruising. As a result of his visit it seems likely that all Australian fruit growers may adopt uniform shapes in their cases and imitate closely the packing methods in vogue on the Pacific coast of the United States. In the over-sea exportation of Tasmanian fruit a uniform temperature of 33 degrees is maintained for both apples and pears. In the case of pears, shipments are made only on such ships as leave Hobart direct for England with chambers finally closed, so that there can be no change in the temperature.

Seeking New Markets—Spraying Machines.

In view of the greatly increasing production of apples and pears in Tasmania, considerable effort is being made to find larger markets for the disposal of the fruit, especially on the continent of Europe,

and there has been considerable success in this direction in Germany, Denmark, and Sweden; but an effort last year to ship apples to New York resulted in a loss, partly because of damage in transit from England across the Atlantic and partly because of the tariff duties.

In connection with the Tasmanian fruit industry there is considerable use for American motor spraying machines and also American arsenate of lead for fighting the codling moth, which would otherwise ruin the apple industry. Some of the spraying machines are of local manufacture, as regards the body and also the pump, but are driven by American motors. A picture of such a motor spraying machine in use here with an advertisement describing it is forwarded, also a picture of a motor lorry in one of the apple districts conveying 131 cases of apples from the orchard to the steamer. [These pictures will be loaned to interested firms on application to the Bureau of Manufactures at Washington.]

GREATER USE OF TYPEWRITERS IN CHINA.

[From Consul General George E. Anderson, Hongkong.]

Importers of American typewriting machines report that recent changes in Chinese political and commercial organization are increasing their sales. There has been a steady increase in the use of typewriters among progressive Chinese business houses for some time and the movement toward modern things generally following the revolution is stimulating the adoption of all such modern business conveniences. Foreign firms in the open ports are also increasing the use of typewriters. Until recently many of them still corresponded in handwriting and it has been difficult to break some of the old and conservative firms away from such methods. However, about 500 typewriters are now in use among such firms in Hongkong at present and at least 450 of these machines are American. Purely Chinese firms are now using perhaps 50 machines and more are being sold daily. Business college instruction in various Hongkong schools is producing a large and increasing force of stenographers among young Chinese and Eurasian people, so that the possible use of typewriters to advantage is greatly increasing.

It is difficult to ascertain the exact importation of typewriters into China. Imports of such machines in the national customs returns are included in other general items. Details of imports of such machines in various ports show importations of typewriters to the value of \$48,112 gold in 1910, of which about 60 per cent go to Shanghai, but these figures are incomplete and the valuation is more or less empirical. It is probable that imports of typewriters into China and Hongkong now reach about \$100,000 annually and are likely to show a notable increase.

CANNED MEATS IN AZORES.

[From Consul E. A. Creevey, St. Michaels.]

Packing-house products of an English firm are taking the place of many well-known American brands that were formerly sold here. One of the dealers in this line frankly stated to the writer that the goods he is now handling do not equal in quality the American products, but, to use his words, "What are we to do, as we can not get goods direct from America?"

NATIONAL CHAMBER OF COMMERCE.

At a meeting of the board of directors of the Chamber of Commerce of the United States of America in Washington, June 4 and 5, the following permanent committees were decided upon: (1) Membership; (2) Membership Qualification; (3) Interstate Commerce, with subcommittees on Federal Regulation, Statistics and Standards, Industrial Workers, Industrial Education; (4) Foreign Commerce, with subcommittees on North American-European Trade, Latin-American Trade, Oriental Trade, Statistics and Standards, Consular Service; (5) Traffic, Transportation, and Communication, with subcommittees on Railroad, Canal and River (interior), Ocean, Post Office, Telegraph, Telephone; (6) Legislation; (7) Currency and Banking; (8) Immigration; (9) Commerical Organization; (10) Publicity; (11) Ways and Means; (12) Auditing.

The bill which was introduced in Congress for the incorporation of this national commercial organization was amended in the House Committee on the Judiciary by the addition of the proviso "That nothing herein contained shall authorize said corporation to engage in business for its own profit." It was then reported favorably to the House of Representatives on June 7 and ordered printed. The following is the form of the bill:

A BILL To incorporate the Chamber of Commerce of the United States of America.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Horace H. Allen, Bernard N. Baker, Frederick Bode, A. M. Cooper, C. G. Craddock, A. C. Dixon, John Joy Edson, John H. Fahey, A. B. Farquhar, Everett G. Griggs, H. J. Hodge, P. J. Kruesi, I. H. Kempner, B. F. Kauffman, Albert J. Logan, William D. Mullen, Elias Michael, Ludwig Nissen, Francis F. Prentiss, Lewis W. Parker, John P. Truesdell, J. N. Teal, W. B. Thompson, August H. Vogel, Harry A. Wheeler, George H. Whitchee, Harry T. Wickes, and E. P. Wells, citizens of the United States, members of a voluntary association known as the Chamber of Commerce of the United States of America, their associates and successors, are hereby constituted a corporation by that name for the purpose of encouraging trade and commercial intercourse among the States, the District of Columbia, the Territories, and insular possessions of the United States of America and with foreign nations; and for these purposes to have, possess, and enjoy the right to establish and maintain headquarters in the District of Columbia; to own only such property, real and personal, for office purposes, as may be necessary to carry on the work of the corporation; and, in general, to do and perform all things necessary to accomplish the purposes of the corporation: *Provided*, That nothing herein contained shall authorize said corporation to engage in business for its own profit.

Sec. 2. That the right to amend, alter, or repeal this act or any part thereof is hereby expressly reserved.

INCREASING SOUTH AFRICAN IMPORTS.

[From Consul E. A. Wakefield, Port Elizabeth.]

The imports at East London for the first three months of 1912 were \$5,063,600, as compared with \$4,459,700 for the same period in 1911. At Port Elizabeth the imports were \$11,240,150, against \$10,527,700. The imports into this consular district constitute 36 per cent of the total imports at the five principal ports of South Africa, including Cape Town, Durban, and Lourenço Marquez, each of which shows a decrease in imports from the corresponding period last year.

The large wholesale houses at Port Elizabeth are keenly alive to the importance of maintaining close trade connections with the interior points, as these returns fully demonstrate. American manufacturers are well represented in the volume of trade, with prospects favorable for a steady and healthy increase.

SOUTH CHINA ANTIMONY.

[From Consul General George E. Anderson, Hongkong, supplementing brief articles in *Daily Consular and Trade Reports* for May 28, 1912.]

Apparently the interest in the United States in the export supply of antimony, both refined and regulus and ore, of China has so increased as to take in the possibilities of increased shipments of the various forms of the metal from the South China fields. Inquiries are increasing and shipments from the South China field through Hongkong, while still small, are increasing. Shipments of antimony ore and of refined antimony and antimony regulus from all China in 1910 amounted to 1,082,019 taels in value (about \$680,000 gold), and the average value of shipments for the three years preceding last year was substantially that figure. Nearly two-thirds of these shipments consisted of the refined antimony and antimony regulus. Of the refined and regulus Great Britain took about half, while France imported a third of the remainder, and Germany and Belgium took most of the rest. Of the ore Great Britain took about 42 per cent, France about 22 per cent, Belgium about 12 per cent, the United States about 11 per cent, and other nations the balance. Shipments of all forms of the metal have varied greatly from year to year, however, both in general volume and in the countries of destination. In 1908, for example, shipments of the refined metal and antimony regulus amounted to more than 1,000,000 taels, or more than \$650,000 gold in value, and the United States took about 25 per cent of the whole.

Source of Supplies.

Of the shipments during the past three years the great mass has come from the mineral country south of the Yangtze River below Hankow and through the ports of Changsha, Yochow, and Hankow itself. However, during these three years there have been small but increasing shipments both of ore and metal through Hongkong from the mineral district along the West River in Kwangtung and Kwangsi Provinces, centering about Wuchow and including Nanning and Mengtze.

The industry in this part of China has had a somewhat varied development. Shipments commenced several years ago under private enterprise, but soon languished. The provincial government then took the matter up as a government enterprise and imported some mining machinery in 1909 with a view of urging the industry forward. In 1910, however, the industry again returned to private hands, and there has been a slow but steady increase in the output of the mines ever since, the industry being substantially favored by the work of foreign-trained Chinese mining engineers.

Smelting the Ore—Special Stimulus to Industry.

About a year ago Chinese exporters concerned in the trade collected a considerable amount of antimony ore and smelted considerable at Wuchow, and some of this stock was sold in the United States. Considerable quantities are said to be on hand at the present time, but owing to recent revolutionary troubles there has been difficulty in moving them. The connections of Chinese producers in the South China field with outlets abroad also are imperfect. The antimony fields in South China, especially along the West River, are said to be

more extensive than the fields in Central China, from which most of the shipments abroad so far have been made, but the development of the iron and steel industry in the Yangtze Valley at and near Hankow has given the production of antimony in that district a special stimulus and has taught producers something of business in the metal which the producers and possible producers in South China so far have lacked. At present the production of the refined metal and regulus in South China is confined almost entirely to Chinese firms in Wuchow which export through Hongkong middlemen. The metal and ore can be bought on commission in the Hongkong market through import and export houses generally. Direct trading from producers to consumers in the United States may be possible, but it will require investigation and approved credits. Production at Wuchow at present is practically controlled by an antimony works at Wuchow [address obtainable from the Bureau of Manufactures]. The present price of antimony regulus is about \$16 local currency or \$7.68 gold per picul of 133½ pounds.

PAPER PULP FROM MANCHURIAN KAOLIANG.

[From Consul Albert Pontius, Dalny.]

Kaoliang, or tall millet, is extensively grown in Manchuria. In fact, it is the staple food of the Chinese and the principal grain feed of the animals. The kaoliang stalk itself plays an important rôle in Manchuria, being put to a great variety of uses. The outer leaf layers are woven into mats, which are so much required in the trade of the country for inclosing ricks and packing loads of grain and beans, and are used for numerous other purposes, such as making baskets, hats, brooms, etc. The stalks are also utilized for fencing, and even in the erection of houses, and, more than all, for fuel.

The central laboratory of the South Manchuria Railway Co. at Dairen (Dalny) made a series of experiments in manufacturing pulp from kaoliang stalks, the results obtained being stated as follows:

Estimating the total area under cultivation within easy reach of South Manchuria Railway stations at 1,060,500 acres, about 424,200 acres (or 40 per cent) are devoted to the production of kaoliang. The total quantity of kaoliang stalks thus produced in a year is, roughly, 1,225,500 tons, of which 980,400 tons are consumed in various ways [as noted above], leaving a surplus of 245,100 tons (or 20 per cent) available for pulp making. The price of kaoliang stalks varies according to the seasons and localities, but generally it is lowest during the winter, when the cartage is comparatively cheap, and the stalks can be bought for about \$2.50 per ton.

Ingredients Needed and Results Obtained.

The waste matter contained in the stalks which can not be made into pulp, i. e., the loss in weight during the preparation of the raw material, is 23 per cent of the stalks collected, thus leaving only 77 per cent suitable for pulp.

The amount of caustic soda required for the pulping process, which takes eight hours under a pressure of 65 pounds, is 15 per cent of the prepared stalks; bleaching powder required, 6 per cent of the prepared stalks; sulphuric acid required, 1.8 per cent of the bleaching powder. Result: Pulp obtained, 25 per cent of the original unprepared stalks, or about 34 per cent of the prepared stalks. The pulp thus made is yellowish white. To make it milk white, 14 per cent, instead of 6 per cent, of bleaching powder is required.

The manufacture of paper in this country is largely dependent upon the supply of alkali, which has all to be imported from abroad at present, but the feasibility of the alkali industry in Manchuria is now forming an interesting subject of chemical study on the part of the laboratory. Until this problem is solved satisfactorily, paper making from kaoliang stalks, viewed from a purely commercial aspect, can not be considered as promising.

NOTES FROM SYRIA.

[From Vice Consul Lorenzo Y. Manachy, Aleppo, May 13.]

Raisins and Figs.

The districts of Antioch, Killis, Aintab, and Marash, all in this Province, produce raisins and figs in abundance, and some export thereof is made to Egypt, Austria, Germany, and, from time to time, to the United States. Although the qualities in general are fair, and some among the varieties even as good as those of any other place, the local packing industry is entirely lacking, otherwise greater quantities of figs and raisins could be shipped to the United States. When the packing system is introduced in this country increased facilities for marketing their products will be provided for the proprietors of vineyards and fig orchards.

Increasing Trade in Pistachio Nuts.

The foreign demand for pistachio nuts is steadily increasing. Prices have, in consequence, advanced. The batman (7.04 pounds) is now worth in Aleppo and Aintab 65 or 66 current piasters (\$2.25 or \$2.28). For shipment to the United States they are generally packed in tin boxes after having been salted and roasted.

Proprietors in the producing centers, encouraged by the excellent income given by the pistachio trees, are planting new trees. The pistachio tree grows as large as an ordinary olive or apple tree and has a very long life, but does not come into bearing until the eighth year. The value of pistachio nuts exported to the United States in 1909 was \$78,950; in 1910, \$106,800; in 1911, \$102,200.

Tobacco Culture.

The higher regions in this Province are well adapted for the culture of the tobacco plant, and this industry could be developed profitably in several localities were it not for the restrictions imposed by the *Régie des Tabacs de l'Empire Ottoman* (Government monopoly). Whereas in the bordering Province of Lattakea cultivation of tobacco is encouraged to the point of constituting one of the principal resources of the natives, the Vilayet of Aleppo produces only a portion of the tobacco needed for local consumption.

In the district of Aintab a very strong quality of tobacco is raised and exported to Egypt. Last year a shipment of this quality was made to the United States and there is some hope that this trial will attract further orders. It is said that the Aintab tobacco can be used advantageously for cigar filler.

Hand Embroideries.

The manufacture of embroideries and embroidered linen handkerchiefs is rapidly developing. A few years ago these articles were sent exclusively to the United States, whereas now important shipments are made to several countries in Europe.

This industry owes its revival after the events of 1896 to the initiative, zeal, and philanthropic sentiments of two members of the American mission, Mrs. Shepard, wife of Dr. Shepard, head of the American Hospital in Aintab, and the late Miss Corinna Shattuck. This industry, starting from Aintab, the headquarters of the mission, has rapidly spread to the other cities, towns, and villages of the Province, and now constitutes a means of livelihood for thousands of women and girls.

Syrian Wool for the United States.

The new wool clip has begun, and it is supposed to be fair. Prices have within the last few weeks advanced 7 to 8 per cent on account of orders passed by firms in Beirut to their buying agents here. It is calculated that four-fifths of the Syrian wool is bought, either directly or through London and Marseille firms, by the United States. The value of wool shipped to the United States in 1909 was \$513,060; in 1910, \$131,045; in 1911, \$508,670.

The wool exported from here is generally washed in cold water and packed in hand-pressed bales weighing 110 to 130 kilos each (242.5 to 286.6 pounds). It is sold under two denominations, the Aleppo and the Orfa, the latter being considered a little superior to the former and invoiced a little higher. The two qualities are used in the United States especially for manufacturing carpets and mattresses. The wool can be bought in Aleppo with a guaranteed yield of 90 per cent, according to the Marseille testing system.

A Possible Opening for American Flour.

Flour from different countries is now sold on the Aleppo market, and its importation will very probably continue and increase. The opportunity is perhaps offering for American millers to try the introduction of their products not only in the Province of Aleppo but also all over Syria. Lately an American firm sent to some commission houses in Aleppo small samples of flour of different grades with quotations per carloads f. o. b. New York. The packing was mentioned as being in barrels. It seems that no order whatever has been given to this American firm, because the shipment in barrels was found inconvenient and inadequate and the minimum order (a carload) too large for a flour which has not yet been tried by the local consumers.

Roumanian, French, and Russian houses do not hesitate to accept orders for 10 to 50 sacks. American millers wishing to introduce their brands on the Syrian markets should in the beginning accept small orders and arrange to give quotations c. i. f. Syrian ports for flour packed in double sacks (the inner one fine jute) and weighing exactly 100 kilos (220.46 pounds), which weight is the regular one supplied by European concerns.

Crop Outlook—Banking and Financial Conditions.

Until the last of March the grain crops were very promising all over northern Syria and Mesopotamia, but needed a final good rain. Unfortunately, however, during the first half of April no rain fell and an exceptional heat prevailed. This has caused much damage to the country, and the prospects for the excellent crops which existed for this year have vanished and the outlook now is for only mediocre yields.

Besides the Imperial Ottoman Bank and the Deutsche Orient Bank, which have regular branches, several other well-known banks have correspondents in Aleppo, among whom could be cited the following firms: Rizcallah N. Gazale, Nametallah & Desiree Homsy, Nasri P. Homsy, Albert Homsy, Joseph Assouad & Frères, and Zollinger & Co. The present war has somewhat affected this place, but no failures of any importance have occurred, and so far the situation looks financially healthy.

CURACAO TRADE NOTES.

[From Consul Elias H. Cheney, Curacao, Dutch West Indies.]

Motor Line—Automobiles—Steam Roller.

The new motor car tramway, recently inaugurated, is operating successfully and giving great satisfaction; it is 1-meter gauge, with 60-pound rails (from Germany), with gasoline motor cars (from England) seating 30.

Curacao imported two \$1,000 automobiles from the United States in 1910, about four since then, and it is said that a few more will come—motors of moderate price and speed. The roads are good, but few can afford automobiles. The Curacao Automobile Co. announces that it will start a public service at \$2 per hour.

A new steam road roller, made in England because no American maker quoted satisfactory price, has been successfully remodeling the streets of Curacao for about three months, marking a long-desired improvement. The old coral-rock paving stones are being taken up, crushed, and used for macadamization. The streets of the whole business part of the city will thus be made over.

Phosphate, Sisal, and Ostrich Enterprises.

An American company has taken option on the extensive Maal phosphate lands in Curacao, at \$60,000 and a royalty of 25 per cent on profits. The American who arranged it has gone to Seattle to complete arrangements, expecting to take possession and begin operations before December 1.

The sisal-growing experiments in Curacao are promising, especially as the young plants have done well through the longest dry weather the islands have known. Rainfall for 15 months ended May 31, 1912, was only 8.9 inches. From the 10,000 plants set out by the Government three years ago sisal of excellent quality has been cut. The success of this experiment led to the formation of the First Sisal Culture Co., of Curacao, capital \$62,000, financed in Holland, and represented here by C. S. Gorsira, American vice consul. The Government has loaned to the company \$12,000, payable in profits, and a 2,000-acre plantation has been leased, for which 320,000 plants have been purchased, one-half each from Trinidad and Surinam. Plantation labor costs only 30 cents per day for able-bodied men, down to 10 cents for boys. If sisal succeeds, it will become the island's main industry.

A company has been organized, with Dutch and local capital, to establish an ostrich farm in Curacao. It is believed that the climate is adapted to the raising of ostriches. The chief promoter has selected a farm and has gone to Egypt to select birds.

Panama Commission—Harbor Work—Straw-Hat Industry.

A Panama Exposition Commission has been organized by business men of Curacao. H. P. de Vries is president and H. J. C. Henriquez secretary. The object is to interest the colony in the opening of the canal and the ceremonies in connection therewith, and to point out what advantage Curacao may hope to realize. It is hoped, labor being cheap, that many vessels can be induced to coal and water here.

The work of widening St. Anns Bay, the entrance to Curacao Harbor, is soon to commence. The width will be increased from 180 feet to 263 feet, by a corps of Army engineers, which will greatly aid the passage of vessels.

During the first quarter of 1912 Curacao exported 30,692 dozen jipijapa straw hats, invoiced at \$91,126. The increased sale over previous years is due to great improvement in their quality, wrought by the colonial government school of instruction, whose director visits homes all over the island, instructing the braiders. He spent some weeks in Venezuela, whence the straw comes, looking after improvement of the straw, and several weeks in Porto Rico, studying the best methods of hat making. The hat business of Curacao has been greatly improved in the last 18 months. Many parties have been here recently from New York to investigate it.

PENGUIN-OIL INDUSTRY AT MACQUARIE ISLAND.

[From Consul Henry D. Baker, Hobart, Tasmania.]

What is probably the most southerly industry of the world, is being carried on at Macquarie Island, about halfway between Tasmania and the Antarctic Continent, in the capture of penguins for their oil. Macquarie Island belongs to the State of Tasmania and has an area of about 25,000 acres, being about 25 miles long and 5 miles wide. The island is leased by the Tasmanian Government to Mr. Joseph Hatch, who has established a penguin oil industry there. Recently meeting Mr. Hatch, I obtained the following particulars from him.

There are probably 80,000,000 penguins on the island, so that the stock to be drawn from seems almost limitless. There are also a large number of sea elephants about the shores of this island. The oil is obtained from the penguins by boiling the carcasses in digesters capable of dealing with 800 birds at a time. The tops of the digesters are fastened down and steam applied until about 25 pounds pressure is obtained. The steam is then turned off and water pumped into the bottoms of the digesters, this causing the oil to rise, when it is taken off the top by a tap.

The oil is placed in barrels and sold to binder-twine makers in Australia and New Zealand. There is a good market for all the oil that is produced here, but the industry has met with several severe losses through wreck of ships attempting to visit the island. There is no harbor about the island, so that vessels have to lie about half a mile off the rocky coast, and all material has to be conveyed to and from the shore on rafts formed of casks. Owing to the roughness of the open roadstead, it is impossible to obtain insurance for vessels trading there.

Macquarie Island is about 750 miles southeast of Hobart. The island is barren, being covered only with tussocky grass. Whaling ships visiting there have introduced rabbits and Maori hens, which are now quite prolific. The Mawson Antarctic expedition from Australia has established a wireless station there, and daily messages are now being received at Hobart. It was the intention of this expedition to use Macquarie Island as a means of sending messages all the way from their base at Adelie Land to Hobart, but unfortunately the wireless station established at Adelie Land has been unable to communicate with Macquarie Island, owing, it is supposed, to being too near the magnetic disturbances caused by the proximity of the south magnetic pole. The station at Macquarie Island, however, has already proved of considerable value to shipping in Australian waters by giving warning of storms coming up from the south.

FLOUR TRADE OF SOUTH AMERICAN WEST COAST.

[From Consul General W. Henry Robertson, Callao, Peru.]

There are about 9 flour mills altogether in Peru, 1 in Callao (the largest), 5 in Lima, 1 in Trujillo, and 2 in Arequipa. Very little wheat is grown in Peru, so that practically all of that made into flour is imported. In 1907 about 100,000,000 pounds were brought in, having a valuation of about \$1,200,000, according to the official statistics. Of this latter amount, Australia furnished about \$900,000, Argentina \$70,000, Chile \$50,000, and the United States about \$80,000. In 1908 about \$50,000 more was imported, of which Chile furnished some \$750,000, Australia \$170,000, and the United States about \$250,000. In 1909 about \$1,300,000 worth of wheat was brought in, of which Chile furnished about \$600,000, Australia about \$430,000, and the United States about \$200,000.

In 1907 about \$50,000 worth of wheat flour was imported into all Peru, of which the United States furnished about \$46,000 and Chile nearly all of the rest. In 1908 about \$60,000 of flour was imported, of which the United States furnished about \$35,000 and Chile about \$20,000. In 1909 about \$70,000 of wheat flour was imported into all Peru, of which the United States furnished about \$55,000, Chile about \$5,000, and Great Britain about \$4,000. The number of pounds of flour imported in 1907, 1908, and 1909 was, respectively, about 2,500,000, 2,800,000, and 3,200,000.

The Peruvian import duty on wheat of all kinds is 1½ centavos per kilo, while that on wheat flour is 4 centavos per kilo. A surtax of 10 per cent should be added to the above rates. A kilo equals 2.2046 pounds and a centavo about one-half of an American cent. While it will thus be seen that the Peruvian flour mills have strong protection in the shape of an import duty of about 2 cents American currency per kilo, or a little less than 1 cent per pound, on flour, American flour of certain quality will sell here with the proper effort. [A special list of Peruvian purchasers of flour may be had from the Bureau of Manufactures.]

[From Consular Agent George D. Hedian, Esmeraldas, Ecuador, May 18.]

Prices and Shipping Route.

Flour is selling here at \$6.40 per sack of 100 pounds. This includes about \$1 profit per sack. Shipments via New Orleans and United Fruit Line to Colon are more direct than via New York. In addressing local buyers of flour, quote price per sack delivered on board in Esmeraldas. Chicago firms quote and sell lard in that way. [A special list of flour importers at Esmeraldas is available from the Bureau of Manufactures.]

Sales of flour from the United States to the various countries on the west coast of South America during the past five fiscal years have been as follows:

Country.	1907	1908	1909	1910	1911
Bolivia.....	\$2,744	\$2,803	\$439	\$14,085	\$33,072
Colombia.....	165,087	201,300	182,237	148,404	122,222
Chile.....	280,102	280	4,065	20,068	67,172
Ecuador.....	293,594	207,065	247,797	295,138	315,396
Peru.....	322,849	311,482	235,966	494,110	770,064
Total.....	1,064,376	722,970	670,504	971,805	1,325,957

EXPORT TRADE OF STRAITS SETTLEMENTS.

[From Vice Consul General D. Milton Figart, Singapore.]

In the following table of exports from the Straits Settlements during the first quarter of 1911 and 1912 the 1912 values for the United States are those of the invoices declared at the Singapore consulate general; other figures are taken from chamber of commerce reports:

Articles.	United States.			Great Britain.		Continental Europe.	
	1911	1912	1912	1911	1912	1911	1912
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Value.</i>	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
Cloves.....	36	41	\$12,812	13	31		
Coffee.....	21	10	3,861			36	96
Copra.....	241	106	11,520	955	401	15,432	13,063
Cutch.....		186	19,867				
Gambier:							
Cube.....	261	433	62,058	46	126	131	200
Other.....	832	1,617	173,273	956	1,248	1,653	1,520
Gum:							
Copal.....	606	1,399	177,722	718	748	310	555
Dammar.....	84	1,182	21,111	63	1	51	46
Gutta:							
Jelutong.....	1,850	5,193	557,064	158	158	376	72
Percha.....	248	58	13,619	259	306	375	256
Other.....	3	2	2,052	1		2	19
Hides:							
Buffalo.....		18	4,492				
Deer.....		34	10,959				
Elk.....		15	8,080				
Mace.....	8	5	5,299	1	1	8	36
Nutmegs.....	110	123	30,915	15	1		
Pepper:							
Black.....	163	319	67,039	318	75	2,059	814
White.....	147	346	102,788	443	325	656	216
Long.....		31	3,167				
Pineapples.....	14,704	1618	2,420	170,022	181,230	14,331	124,685
Rattans.....	622	731	117,789	183	447	2,290	3,351
Rubber:							
Borneo.....	92	217	182,657	32		77	57
India.....		1	1,435	34			
Para.....	80	266	443,155	979	2,150	27	41
Other.....		19	40,964				
Sago:							
Flour.....	1,965	725	30,250	4,390	5,154	4,584	7,330
Pearl.....	39	25	1,357	590	247	126	293
Shells, mother-of-pearl.....		4	3,062	35	62	10	
Tapioca:							
Flake.....	73	5	456	1,109	616	903	541
Pearl.....	1,568	1,575	129,774	1,810	1,460	1,178	1,444
Tin.....	4,796	2,009	3,523,122	6,530	8,712	1,777	1,770
Wax, paraffin.....		195	50,515				
All other articles.....	42½	105	1,778	641½	2,969	1,999½	3,218
Total.....	13,899	16,995	5,817,052	20,272½	25,238	34,060½	34,949

1 Cases; not included in total.

The principal increases in exports to the United States are noted in gambier, gum copal, gum dammar, jelutong rubber, and Para rubber; while large decreases are noted in sago flour, tin, and, as usual, in pineapples. The increase in shipments of pineapples to Great Britain and the Continent would indicate that acreages which have been freshly planted since the reaction after the rubber boom are gradually coming into bearing.

British commercial commissioner in Honduras.—Consul Arminius T. Haeberle reports the arrival in Tegucigalpa of the special commissioner of the Commercial Department of the British Government to Central America, Colombia, and Venezuela, who is touring those Republics to gather statistics and foster trade.

SPRAYING MATERIALS IN CANADA.

[From Consul Fred C. Slater, Sarnia, Ontario.]

In this section of Ontario a great deal of insecticides is used in spraying orchards and also wheat for the prevention of smut. Formaldehyde is chiefly used for the latter, part of which is manufactured in Canada, and I believe some is imported from Germany.

For orchards farmers usually make their material for first spraying by boiling to a liquid sulphur and lime, which can be made in large quantities quite cheaply; but prepared products are on the market for which the dealer pays \$5 to \$6 per barrel. One American chemical company has a product which it is pushing in this part of Ontario. The largest producer of these commodities is a chemical, iron, and lumber company of Toronto, which has some nine branches established over the Dominion. It manufactures a large number of by-products in connection with the lumber business, among which are insecticides. The Fruit Growers' Association of St. Catharines, Ontario, is extensively in the field in the way of selling fruit trees and incidentally takes orders for spraying material.

I am informed that arsenate of lead is used extensively for second spraying, which costs the dealer 7 to 12 cents per pound. A combination is also used, consisting of 4 pounds of sulphate of copper, 4 pounds of lime, and 4 ounces of Paris green, producing about 40 gallons of material.

These commodities are said to be sold on a very small margin and are carried by most drug stores merely to draw other trade. Most fruit handlers likewise carry them. [The consul prepared a list of dealers in Ontario through whom insecticides could be sold. This list is procurable from the Bureau of Manufactures at Washington.]

CARAWAY SEED IN HOLLAND.

[From Consul Frank W. Mahin, Amsterdam.]

Caraway seed is extensively grown in this country. Groningen, in the northeast corner, produces more than any other Province, next being North Holland, in which Amsterdam is situated. In these two Provinces more than half the caraway-plant acreage is found. In the whole country, in 1909, the number of acres devoted to caraway growing was 17,579; in 1910, 19,010; in 1911, 20,337.

The average yield per hectare (2.471 acres) was 24.1 bales of 50 kilos (110.23 pounds) each in 1909, 23.3 bales in 1910, and 27.3 bales in 1911. The large yield in 1911 is particularly noteworthy and interesting because that was a year of remarkable drought.

The total yield of caraway seed in 1909 in this country was roundly 18,865,000 pounds; in 1910, 19,800,000 pounds; and in 1911, 24,700,000 pounds. The declared value of the exports of caraway seed to the United States from this district in 1909 was \$115,611; in 1910, \$82,247; and in 1911, \$92,663. [The statistics of American imports of caraway and other seeds were given in Daily Consular and Trade Reports for May 18, 1912.]

Caraway seed is used for flavoring, and also, perhaps less extensively, as a carminative. It is employed by confectioners, distillers, and perfumers in the preparation of liquors, cakes, sweetmeats, scented soaps, etc. It depends for its aromatic properties on a volatile oil, which is obtained by bruising the seeds and distilling them in water.

CANADA'S USE OF TIGHT-COOPERAGE STOCK.

[From the Monetary Times.]

As tight-cooperage barrels are used in shipping beverages, oils, and other liquids, the stock is required to be clear and of a species which will not impart a resinous or other flavor to the contents. For these reasons oak, preferably white, is the principal wood used by the trade; and as this species can not be obtained in Canada, the large shippers import it either as staves or in the log from the United States. In the latter country, however, gum and basswood are rapidly taking the place of oak in sawed tight cooperage, so that in a short time a change in the woods used in Canada may be looked for.

Tight-cooperage staves reported in 1910 amounted to 8,379,000 pieces, worth \$272,924. Of this amount 7,137,000 pieces were sawed staves; ale and beer staves numbered 923,000; bucked and split staves to the number of 319,000 made up the balance. Oak formed more than 63 per cent of the total, over 5,300,000 staves being produced; spruce, 8 per cent; gum, 6 per cent; ash, about 4 per cent; the remaining species (basswood, birch, elm, fir, pine, balsam fir, cedar, and cypress) were used in varying small quantities.

Although the quantity of sawed tight cooperage reported in 1910 was considerably less than that in 1909 the total value was \$53,590 more; this was due to the increase of over \$10 per thousand in the average price. The average price in 1910 of \$27.43 per thousand was \$6.67 more than that paid in the United States for 1909, owing to the large proportion which oak forms of the Canadian total and to the fact that this species is United States wood with transportation charges added. The increase in the 1910 Canadian price is seen in all the species except oak and cedar. The price of the former, \$29.31 per thousand, is \$6 less than in 1909, but its larger use more than made up the difference, and brought up the total average. The greatest advance is seen in the price of Douglas fir, which, at \$35, more than doubled its 1909 price. In 1910 balsam fir was the cheapest wood at \$10 per thousand pieces, and cypress the most expensive at \$60.

[American official records show the following exports of staves from the United States to Canada in the fiscal years ended June 30: 1907, 6,298,178, value \$231,367; 1908, 7,350,380, value \$274,803; 1909, 5,167,214, value \$149,085; 1910, 7,560,404, value \$192,540; 1911, 10,686,036, value \$252,623. The species of wood represented by these totals are not separately stated in available data.—B. of M.]

AUTOMATIC TARGET INVENTION.

[From Consul General John L. Griffiths, London.]

An invention attracting considerable attention in the United Kingdom is an automatic recording target which shows on an indicating instrument at the firing point the precise point on the target hit by each shot fired. A London newspaper claims that—

By the use of this apparatus the employment of markers at the ranges may be entirely dispensed with, thus effecting a considerable saving in expense, as well as giving the marksman an almost instantaneous reproduction of his shot on the dial by his side. It is applicable to ranges of practically any size—from 25 to 2,000 yards—and to both stationary and moving targets, with any scenic surroundings that may be required. As a moving target, not only the actual hits are recorded on the indicator but also the misses (in advance, above, below, or behind the moving figure aimed at), and the marksman is able to rectify his mistakes at once. The target is also adaptable for naval use, so that crews need not come ashore to practice musketry. On a target 2 feet square upward of 147,450 shots can be recorded. The invention has been seen in operation by several well-known military experts, who have expressed themselves as being greatly impressed with it.

Consular Agent E. M. Lawton, of Oaxaca city, states there is a local band in almost every Mexican town or village of any size in the State of Oaxaca. However, no attempt is made to uniform them, except the military and regimental bands of the capital city.

CHILEAN MINERAL DEVELOPMENT.

[From Consul Alfred A. Winslow, Valparaiso.]

The completion of the Longitudinal Railway from Santiago to Iquique promises much for the mining interests in the north of Chile. The work is progressing rapidly and should be completed by 1914, when a large section of rich mineral lands will be provided with good transportation facilities. The following quotation, taken from the South Pacific Mail, of this city, gives the views of one well informed from personal observation and investigation:

Mr. Arthur MacDonald, the Canadian engineer connected with the Northern Longitudinal Railway, prior to his recent departure for Europe expressed himself most emphatically on the great possibilities for industrial development in northern Chile. In his opinion the copper mines which abound in the Province of Antofagasta will necessitate the construction of at least one smelting establishment in Antofagasta, and probably two later, as the service of the Longitudinal Railway will insure the carrying of ore to the coast. All the mine owners are anxious that smelting works be established, to enable them to sell their ore at prices equal to what they would receive in European markets. He further asserts that there are now sufficient nitrate grounds to warrant the working of 10 more large oficinas.

American interests are now examining mining properties in that section of the country, and it might pay others to secure some of what is said to be equal to any copper deposits yet discovered.

CHINA LOWERS TELEGRAPH RATES.

[From Consul General Samuel S. Knabenshue, Tientsin.]

The Chinese Government has announced a sharp reduction in telegraphic rates within China taking effect on June 1, 1912.

Messages in Chinese cipher, or in any foreign language, will be transmitted between any two points in China at the uniform rate of 12 cents Mexican per word, equivalent to 5½ cents gold. Ordinary Chinese messages and foreign press messages will be transmitted at 6 cents Mexican per word (2½ cents gold), and Chinese press messages at 3 cents Mexican (1½ cents gold) per word.

Telegrams transmitted between two points within the limits of the same Province will be charged as follows: Chinese cipher or foreign messages, 6 cents Mexican (2½ cents gold) per word; ordinary Chinese and foreign press messages, 3 cents Mexican (1½ cents gold) per word; Chinese press messages, 1½ cents Mexican (7 mills gold) per word.

JACKS FROM WESTERN ASIA.

[From Consul Emil Sauer, Bagdad, Turkey.]

Kentuckians seek information in regard to the character of jacks to be found in this district. It would not be profitable to come here for the purpose of buying. The jacks here are almost all of a very small species. Larger and better developed jacks are raised in large numbers at El Hassa, on the Persian Gulf side of Arabia. These could be shipped from Bahrein (Islands), which has steamship connections with India and Europe. The jacks found at El Hassa are of good size, 4 to 4½ feet high, and range in price from \$35 to \$53 per head. A better type of jacks is also found at Maskat, Arabia, in Palestine, and in Syria.

SOUTH AFRICAN NOTES.

[From British and South African Export Gazette.]

Two new large tanneries are likely to be started in Natal in the near future.

Sanitation.—An Association of Sanitary Inspectors for South Africa has recently been formed at Johannesburg.

An electric lighting scheme for Matatiele, East Griqualand, will probably be undertaken when the new waterworks are completed.

Machine tools.—We have information that the Johannesburg municipality is in the market for a number of machine tools, including lathes, circular and other saws, screwing machines, mortising and boring machines, and air compressors.

Public works, such as an agricultural station, hospitals, a light railway, etc., will be carried out shortly in the Lourenço Marquez and Inhambane districts, as the result of the Portuguese Government's decision to devote 12 per cent of the land tax to local development works.

Waterway traffic.—The first attempt to exploit the great waterway of the Zambesi is being made with a number of lighters built by the Bulawayo firm of Dechow & Tweedale. If successful the results will be of the highest business importance by the opening up of new native markets and a great trade route.

Coal-handling plants.—Valuable contracts will shortly be on offer as the result of the decision to improve the coal-handling plant at Durban at the cost of \$321,000. We are informed that an order for a coal-loading plant is to be placed by the Portuguese Government for Lourenço Marquez, the cost being estimated at \$100,000.

Electric plant.—The Cape Town municipality is about to extend its electric lighting works, and also to purchase the interests of the Cape Peninsula Lighting Co., for which a loan of \$350,000 is being raised. An economizer, steam turbine, transformers, cables, and switch gear are about to be imported for the Cape Town municipality.

Railways.—The recent South African Railway loan estimates presented to Parliament show a contemplated expenditure of \$10,000,000 on new lines. Important orders for rails and other railway material for strengthening main lines and relaying branch lines are about to be placed by the South African Railways Administration, the total cost of the work being given at \$1,688,000.

A trackless tramway system has been recommended for installation by the Germiston municipality by Mr. H. N. Thomas, general manager of the Durban tramways. The total route suggested is 6½ miles in length, and the capital outlay would be \$200,000. An experimental mile of trackless tramways is to be constructed at Aberdeen, Cape Province; only two cars will be purchased at first.

Gas appliance sales are making headway at some Cape centers in spite of the popularity of electricity. For instance, the Cape Town and District Gas Light & Coke Co. (Ltd.) last year laid 300 yards of new mains and 276 new services, fitted 458 new prepayment installations, 404 additional cookers, 73 geysers, 3 heating stoves, and 3 radiators. The South African Lighting Association (Ltd.) also reports only a small decline in gas consumption at Port Elizabeth, while at Grahamstown there has been a satisfactory advance.

Mining machinery.—(1) The importation of a complete plant of larger capacity than that at present installed, and specially designed to deal with pyritic ore, is under consideration for the Mali Dyke gold mine, Pilgrim's Rest district, Transvaal. (2) Orders will shortly be on offer as a result of the decision to make certain considerable additions to the plant of the Transvaal Coal Trust Co. (Ltd.). (3) The purchase of a small mill for the Felixburg Claims property of the Rhodesia Gold Mining & Investment Co. (Ltd.) is under consideration. (4) In connection with the important additions to the reduction plant of the Cinderella gold mines, Transvaal, which are to be undertaken, some valuable orders will shortly be on offer. (5) A complete new mill is required for the Mystery gold mine, Rhodesia. (6) Orders will shortly be distributed in connection with the additions to the reduction plant of the Sabi gold mine, Rhodesia, which have been decided upon. (7) Orders are to be placed for large additions to the concentrating plant of the Messina copper mine, Transvaal. (8) A large treatment plant, with a capacity of 15,000 tons per month, is to be imported for the Cam and Motor gold mines, Rhodesia. (9) Orders for additional plant for the cyanide equipment of the Benoni Consolidated gold mine may be anticipated in the near future.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying to addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9075. Gas engines.**—An American resident in an important coffee-growing country in which there are many small holders of from 5 to 15 acres, with a view to establishing agencies, writes the Bureau of Manufactures that he desires to be supplied with terms, catalogues, styles, and prices of light, durable gas engines, fixed and portable, of standard make, from $1\frac{1}{2}$ to 10 horsepower. These engines should be suitable for running coffee pulpers, capping machines, pumps, circular saws, etc. He writes that he is willing to furnish satisfactory references.
- No. 9076. Timber and woods of various kinds.**—An American consul in a Mediterranean country reports that a local merchant and commission agent desires to be placed in communication with American exporters of common timber, mahogany, oak, teak, pitch-pine, and other woods. Correspondence may be in English, and prices should be quoted c. i. f. city of destination, if possible.
- No. 9077. Timber proposition.**—A report has been received from an American consular officer in Russia containing a copy of a communication from a resident of that country in which he requests to be placed in touch with American capitalists and others who might be interested in timber propositions which are described in the communication. Copy of the complete report will be sent to interested persons by the Bureau of Manufactures.
- No. 9078. Tenders for Government transport.**—The American consul at Montevideo, Uruguay, reports that a call for tenders is now appearing in the *Diario Oficial* for a marine transport for the Government of Uruguay, the plans and specifications for which may be seen at the Ministry of Public Works, Montevideo. Tenders will be received until July 26, 1912.
- No. 9079. Corn.**—An American consul reports that two commission merchants in a European city of 160,000 inhabitants desire direct connections with American exporters of corn. They will correspond in English, and offer to furnish references.
- No. 9080. Lard.**—A report from an American consul in a European country states that commission merchants and agents in several large cities of his district desire connections with American exporters of lard. Correspondence may be in English.
- No. 9081. Fruits.**—Several commission merchants in Germany have informed an American consulate that they wish to hear from exporters of fresh and dried fruits in the United States. Correspondence is preferred in German.
- No. 9082. Ice breakers.**—The American consul general at Tientsin, China, has forwarded copies of the specifications for two ice breakers, which are required by the Haiho Conservancy Commission of that city, to be used in keeping the Haiho (river) open from Taku Bar up to Tongku, whence there is railway communication with Tientsin. Tenders must be in the commission's office by August 26, 1912. Specifications referred to will be loaned to interested persons by the Bureau of Manufactures.
- No. 9083. Canned fruits.**—An American consular officer in a Mediterranean port writes that an importer of canned goods would like to import directly from manufacturers. At present he is receiving consignments of canned fruits from England and other European countries, but he is especially desirous of importing American canned peaches, pears, plums, and pineapple.
- No. 9084. Coal and other products.**—A request has been received at an American consulate to put the inquirer in touch with American shippers of bituminous coal. The consul states that this person has special facilities for securing contracts with the Government railroads and the navy. During recent conversations he has shown great interest in the increased sale of American goods, and has expressed a desire to represent American houses that deal in articles purchased in quantities by the local Government. The consul believes he would make an excellent representative for American houses interested in the proposition.

DAILY CONSULAR AND TRADE REPORTS

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15th Year

Washington, Thursday, June 27, 1912

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TRADE AND INDUSTRIES OF NOVA SCOTIA.

[By Consul General James W. Ragsdale, Halifax.]

Commercial and industrial conditions in the Canadian Province of Nova Scotia during 1911 were satisfactory. The coal production reached high-water mark, and the output of the fisheries was fully up to expectations. Money was plentiful for all legitimate enterprises, the manufactories increased their output, labor was plentiful and free from strikes, and the export trade largely increased over 1910.

The value of improvements in the Province exceeded that of 1910 by nearly \$1,000,000, and there were fewer failures than for many years previous, while the sum total from all sources surpassed that of 1910 by more than \$5,000,000. The only declines reported for the year were in lumber and agriculture, but in these the increased prices and the unprecedented apple crop made the losses small in comparison. The value of all productions in the Province for the year was as follows: Farm and live-stock products, \$25,699,900; mining, \$38,161,303; forest, \$5,000,000; fisheries, \$10,119,243; manufactures, shipping, and freights, \$45,500,000; total, \$124,480,446.

Fishery Products.

Nova Scotia is noted for its fisheries, and in this industry leads all other Provinces of the Dominion. The total catch in all Canada for 1911 was valued at \$29,965,433, an increase of \$2,342,236 over the preceding year. Of this total, Nova Scotia supplied \$10,119,243, and \$2,038,131 of the increase. In the Nova Scotia industry there were employed 1,680 vessels and tugs and 38,977 boats, the whole being manned by 68,610 men. Besides, 24,978 persons were employed in the various canneries and fish houses on shore. The exports of fish from the Province to the United States last year were valued at \$1,618,324 compared with \$1,298,299 for 1910, fish products \$44,894 against \$30,419, fresh lobsters \$137,950 against \$106,728, and canned lobsters \$163,828 against \$209,553. Fish to the value of \$310,158 were shipped to Porto Rico and \$16,458 worth to Hawaii.

Acres, Yield, and Value of Crops.

There were disappointments in the agricultural industry due principally to the drought in the early summer. The acreage planted was only about two-thirds of that in the preceding year. The immense apple crop and the higher prices received for the other productions helped out in the money total, leaving a shortage as compared with 1910 of only \$4,719,661. The acreage planted and yield for 1911 and value of crops for 1910 and 1911 in the Province according to the best obtainable information were as follows:

Crops.	Acreage, 1911.	Yield, 1911.	Value.	
			1911	1910
		<i>Bushels.</i>		
Apples.....		1,700,000	\$3,000,000	\$900,000
Barley.....	6,361	164,000	130,000	192,000
Beans.....	986	21,000	43,000	130,200
Buckwheat.....	7,904	172,400	121,000	243,000
Corn for husking and fodder.....	164		28,900	100,625
Garden truck.....			1,200,000	1,800,000
Hay and clover.....	412,864	1,706,000	8,472,000	10,129,230
Live-stock products.....			6,500,000	7,000,000
Mixed grains.....	11,689	343,200	241,000	300,000
Oats.....	84,499	2,471,000	1,307,800	2,775,100
Peas.....	195	4,600	7,000	47,250
Potatoes.....	26,586	4,884,000	2,930,400	5,096,000
Spring wheat.....	9,917	208,800	280,000	551,106
Rye.....	963	15,400	14,600	(¹)
Turnips.....	10,323	4,399,000	1,475,000	1,155,000
Total.....			25,689,900	30,419,561

¹ Tons.² Not reported.**Increased Output of Minerals.**

There are but few countries where as many minerals are mined as in this Province. Until late years, however, slow progress was made, the lack of capital and labor strikes being the chief impediments. These obstacles being overcome, wonderful advancement was made in 1911. There was an increase of \$9,730,001 in the value of the output of minerals mined in the Province last year compared with 1910. Gold, limestone, grindstones, and gypsum are largely exported to the United States, the shipment of the latter last year being valued at \$303,569.

The value of the minerals and mineral products of Nova Scotia for 1910 and 1911 was as follows:

Products.	1910	1911	Products.	1910	1911
Antimony.....	\$32,000	\$30,560	Ingots.....	\$8,193,260	\$14,500,000
Bricks.....	143,000	162,159	Iron ore.....	92,120	93,791
Building stone.....	200,000	315,000	Limestone.....	483,100	525,286
Coal.....	15,675,000	17,600,000	Manganese.....	1,500	9,000
Coke.....	1,726,084	2,200,000	Molding sand.....	720	1,520
Drain pipes.....	97,482	143,176	Pig iron.....	1,000,000	1,500,000
Gold.....	202,825	159,411	Scheelite.....	30,000	30,000
Grindstones.....	9,750	11,400			
Gypsum and other minerals.....	484,461	880,000	Total.....	28,431,302	38,161,303

Lumber and Wood Products.

Nova Scotia is a large producer of lumber, a considerable share of which is exported to the United States. The largest mills are owned entirely or in part by Americans. The value of the production for

1911, however, fell short of that of 1910 by about \$500,000. Lumber to the value of \$900,753, wood pulp and pulp wood \$217,549, and other wood products \$152,516, or a total of \$1,270,818, as compared with \$1,693,623 in 1910, were exported to the United States. A large quantity of logs was held up for lack of rain in the early spring, and the prospect for a large output in 1912 is excellent. Wood used in the manufacture of furniture, doors, sashes, matches, barrels and tubs, and other wares aggregated in value \$945,780. One great drawback in the lumber trade is the increase in the ocean freight rates.

Commercial Failures—Motor-Car Trade and Industry.

There was a large decrease in the number of commercial failures of the Province last year compared with the previous four years. The total number of failures last year was 65, against 80 for 1910 and 89 for 1909. The total liabilities amounted to \$269,292, \$447,690, and \$506,208, and the assets \$86,923, \$224,300, and \$191,374 for 1911, 1910, and 1909, respectively. All corporations operating in the Province are required to register annually. The total registering last year was 788, an increase of 44 over the previous year.

The motor car is coming into general use, the total number in the Province at the beginning of the present year being 537, or 75 more than for the same period in 1910. Of the total, 90 per cent are American, 9 per cent Canadian, and 1 per cent European make. A carriage company which commenced building motor vehicles early last year and operating at Kentville, reorganized with a capital of \$200,000 and removed to Amherst. The value of the output of this company for the year ended March 31, 1912, is estimated at \$1,000,000. The principal parts are imported from the United States.

Building Operations—Railway Mileage—Industrial Conditions.

During last year new buildings were erected in the Province to the value of nearly \$2,135,000 compared with \$1,080,000 for 1910.

The mileage of railways in operation during last year was 1,353.82, an increase of only 3.26 miles compared with the preceding year. Contracts have been awarded for the construction of the Halifax & Eastern Railroad, which, when completed, will add about 165 miles to the railway mileage of the Province.

The manufacturers of the Province had an unusually successful year. Extensions to plants and new industries are reported all along the line. The output was increased and at the close of the year but little stock was left in the warehouses. The prices obtained were good and collections far better than in most previous years.

HALIFAX.

[By Consul General James W. Ragsdale]

The city of Halifax is the manufacturing, wholesale, financial, and educational center of the Province of Nova Scotia. Its harbor facilities are among the best on the Atlantic seaboard, and the trade of the port is rapidly growing, last year surpassing all previous records.

The merchants report an increase of at least 30 per cent in the sales over 1910, with a slight loss in collections, while the manufacturers report even greater prosperity. The output of the manufactories,

including the fish products, will exceed in value \$20,000,000, compared with \$18,240,000 for 1910. The car works greatly increased their output, and have orders for months in advance.

Banking and Business Conditions.

The bank clearings for 1911 amounted to \$87,994,000 as compared with \$95,855,316 in 1910. The decrease may be accounted for by reason of the consolidation of two of the largest banks in the city. One of the principal banks declared a dividend of 13 per cent and another 14 per cent. All the banking institutions here report the business tone of the city sound and healthy. Never have the payments and remittances been so satisfactory. The small traders without capital, who are obliged to engage in a credit system with customers who are constantly shifting from one town to another, and so losing entire debts, are being weeded out, and thus the wholesale houses are becoming better protected.

There were only 11 business failures in Halifax during last year, the liabilities amounting to \$50,692, with assets of \$8,090.

Prices of Commodities in Halifax and Other Cities.

The average retail prices of some of the necessities of life in Halifax as compared with other cities in Canada during 1911 were as follows:

Articles.	Halifax, Nova Scotia.	Montreal, Quebec.	Toronto, Ontario.	Winnipeg, Manitoba.
Bacon..... per pound	\$0.20-\$0.22	\$0.16	\$0.18-\$0.20	\$0.27
Beef..... do	.12-.15	.10-.14	.07-.10	.14
Bread..... do	.04	.03	.04	.05
Butter..... do	.30	.28	.20-.23	.26
Cheese..... do	.17	.20	.17-.18	.20
Coal..... per short ton	5.00-5.25	7.00	5.00	9.00
Coal oil..... per gallon	.20	.18-.25	.19	.25
Coffee..... per pound	.30	.25-.50	.25-.40	.35
Eggs..... per dozen	.30	.23	.25-.27	.28
Fish, fresh..... per pound	.05-.08	.06	.08-.10	.12
Lard..... do	.18	.20	.12-.14	.16
Milk..... per quart	.08	.08	.08-.10	.10
Mutton..... per pound	.14-.18	.13	.10-.12	.20
Pork, salt..... do	.14	.14	.12-.13	.21
Potatoes..... per bushel	.90	1.25	1.40	1.50
Rice..... per pound	.05-.07	.05-.06	.04	.05
Sugar..... do	.06	.05	.06	.06
Starch..... do	.10	.08	.07	.08
Tea..... do	.30	.25-.60	.25-.35	.35
Wood..... per cord	3.50	6.00	5.00	6.00

Trade of the Port.

The imports of merchandise into the port increased in value from \$9,356,322 in the fiscal year ended March 31, 1910, to \$9,836,974 in the following year, and the exports from \$11,595,755 to \$12,514,420, respectively. [According to preliminary figures, the total imports for consumption into the port for the year ended March 31, 1912, were valued at \$11,512,546, of which \$7,734,514 represented dutiable and \$3,778,032 nondutiable goods. The exports of domestic products amounted to \$15,467,270.]

Of the imports during the fiscal year 1911, the United States shipped merchandise to this port valued at \$2,158,531, of which \$1,167,995 worth represented dutiable and \$990,536 nondutiable goods, and the imports from the United Kingdom were valued at \$2,872,300, made up of dutiable goods amounting to \$2,124,687 and nondutiable goods \$747,990.

The following table shows the principal imports of dutiable and nondutiable goods into Halifax from the United States and United Kingdom for the fiscal year ended March 31, 1911:

Articles.	From United States.	From United Kingdom.	Articles.	From United States.	From United Kingdom.
DUTIABLE.			DUTIABLE—continued.		
Ale, beer, and ginger ale.....	\$11,313	\$15,500	Vegetables.....	\$19,439	\$12,121
Books, advertising matter, etc.	34,645	11,009	Wood and manufactures of.....	18,182	3,223
Cement.....	144	35,340	Woolen goods.....	4,139	211,631
Cotton goods.....	15,006	131,101	NONDUTIABLE.		
Drugs, chemicals, etc.....	39,589	16,766	Books and printed matter.....	15,601	15,264
Electrical apparatus, carbons, etc.	20,831	4,068	Blast-furnace slag.....		62,037
Fish and products.....	26,676	41,498	Cotton.....	131,025	
Fruits:			Drugs, dyes, and chemicals.....	33,657	22,379
Dried, and nuts.....	50,189	12,690	Fish nets.....	114,191	41,269
Green.....	36,927	12,103	Fruits.....	108,028	18,293
Glass, and manufactures of.....	14,022	28,866	Grass.....	95,006	62,866
Gunpowder, etc.....	1,510	305,285	Iron and steel, and manufactures of.....	10,497	49,341
Hats and caps.....	8,322	26,701	Tin.....	4,382	84,767
Iron and steel, and manufactures of.....	211,273	381,557	Coal, anthracite.....	165,244	
Leather, and manufactures of.....	18,710	3,226	Oil, gasoline.....	60,602	
Oils.....	100,284	55,110	Scientific apparatus.....	11,081	8,151
Paper, and manufactures of.....	30,685	25,200	Settlers' effects.....	20,482	5,713
Butter, cheese, meats.....	201,067	23,246	Tea.....		234,060
Soap.....	13,265	6,141	Turpentine.....	1,069	3,312
Spirits and wines.....	605	115,475	Wood, and manufactures of.....	54,300	1,395
Sugar.....	1,990	143,285			
Tobacco, and manufactures of.....	10,564	2,335			

The customs receipts for the fiscal year 1911 exceeded all previous records, being \$2,117,107, against \$1,772,883 for the previous year.

Principal Exports.

The following table shows the value of the principal exports from Halifax during the fiscal year 1911:

Articles.	Value.	Articles.	Value.
Antimony.....	\$17,173	Paints and varnishes.....	\$37,249
Apples, green.....	871,112	Potatoes.....	237,023
Breadstuffs:		Provisions:	
Flour, wheat.....	967,135	Butter.....	155,082
Oats.....	55,452	Bacon.....	107,919
Peas, split.....	96,582	Cheese.....	317,706
Wheat.....	214,589	Sea fish, pickled.....	45,385
Coal.....	134,644	Silver, ore, etc.....	1,222,970
Codfish:		Steel, and manufactures of.....	84,619
Dry-salted.....	2,905,840	Wood, and manufactures of:	
Wet-salted.....	30,339	Laths.....	25,808
Oil.....	39,842	Match blocks.....	56,706
Cordage, rope, and twine.....	40,410	Matches and match splints.....	83,652
Drugs, chemicals, etc.....	71,359	Planks and boards.....	197,647
Explosives and fulminates.....	78,310	Scantling.....	58,531
Furs, undressed.....	181,084	Shooks.....	63,332
Herring, pickled.....	183,382	Spruce, etc.....	553,845
Lobsters:		Wood pulp.....	117,600
Canned.....	1,735,514	All other articles.....	1,287,316
Fresh.....	99,140		
Mackerel, pickled.....	83,211		
Paper.....	56,912	Total.....	12,514,420

Shipments to United States.

The articles invoiced for shipment to the United States through the American consulate general at Halifax for the calendar year 1911 were valued at \$1,952,810, compared with \$1,618,757 for 1910. This increase was due principally to bonds valued at \$300,078 being declared for shipment to the United States. There was an increase

of \$310,866 in the value of the exports invoiced through the American agency at Lunenburg due to larger shipments of codfish, and the shipments from the agency at Liverpool increased \$78,116, owing principally to larger shipments of wood pulp. The exports from the agency at Bridgewater, however, decreased in value \$179,521, compared with 1910, due to the decreased shipments of lumber. The following table shows the principal items and their value invoiced through the consulate general at Halifax and the agencies at Bridgewater, Liverpool, and Lunenburg to the United States for the calendar years 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
HALIFAX.			BRIDGEWATER.		
Berries:			Gold.....	\$5,600	
Blue.....		\$924	Household effects.....	347	\$339
Fox.....	\$2,893	15,282	Wood, and manufactures of:		
Bonds.....		300,078	Laths.....	28,589	20,394
Castings.....		1,551	Lumber.....	418,023	229,499
Clothes.....		572	Pulp wood.....		9,757
Coins, foreign.....	36,584	11,971	Scantling.....	13,685	23,451
Fish:			Wood pulp.....	7,100	9,922
Cod—			Total.....	473,354	293,833
Dry.....	464,332	374,709			
Pickled.....	5,888	4,355	LIVERPOOL.		
Sword, fresh.....	1,389	3,315	Fish:		
Hake, dry.....	1,996	4,087	Halibut.....	1,145	890
Hake, sounds.....		3,469	Herring, pickled.....		435
Haddock, dry.....	14,935	17,244	Mackerel, fresh.....	4,709	2,168
Herring, pickled.....	53,712	26,389	Household effects.....		403
Lobsters—			Laths.....		2,946
Canned.....	69,188	14,045	Lobsters, live.....	1,053	1,618
Live.....	17,644	25,942	Lumber.....	38,393	48,537
Mackerel—			Wood pulp.....	22,639	90,597
Pickled.....	73,404	32,441	All other articles.....	11,509	
Fresh.....	6,998	28,107	Total.....	69,448	147,564
Pollock, dry.....		1,045			
Jonnies, smoked.....		3,889	LUNENBURG.		
Salmon—			Cod oil.....	5,075	3,774
Fresh.....		31,044	Fish:		
Pickled.....	3,045	6,781	Cod.....	200,007	517,513
Fur, raw.....	1,304	2,358	Haddock.....	6,379	10,114
Gold, bullion.....	32,645	7,133	Hake.....	357	265
Grindstones.....		5,459	Herring.....	33,117	17,409
Gypsum.....	272,762	260,374	Mackerel.....	2,021	16
Hay.....	881	1,419	Pollock.....		965
Hides.....	56,736	41,015	Junk.....	1,696	1,823
Household effects.....	22,007	19,298	Lumber.....	24,383	42,128
Junk.....	14,890	18,722	Potatoes.....	605	273
Kauri gum.....		371	Skins, cod.....	3,178	498
Laths.....	32,594	57,081	All other articles.....	7,099	
Lumber.....	370,397	371,751	Total.....	283,917	594,783
Lime juice.....	8,100	12,807			
Oils:					
Cod.....	20,735	32,621			
Tar.....	314	2,535			
Pulp wood.....	6,298	91,676			
Sand.....	735	402			
Sealskins.....	3,731	4,106			
Raisins.....		355			
Skates, ice.....		1,768			
Sugar, raw.....		112,404			
Yarn, cotton.....		166			
All other articles.....	22,570	1,745			
Total.....	1,618,757	1,952,810			

Fish valued at \$310,158 was invoiced through the consulate general at Halifax to Porto Rico during last year, compared with \$195,213 worth for 1910. Of the total last year dry codfish represented \$297,584. There was also shipped to Hawaii last year \$16,458 worth of dry codfish, compared with \$10,000 for 1910.

Building Operations—Harbor Improvements—Shipping Facilities.

The outlook for building operations in 1912 is said to be much brighter than for last year. Several large contracts have already

been let for new buildings to replace the large number destroyed by the unusual fire of December and January. The cost of these alone will probably exceed the entire building expenditure of 1911.

The freight handled at the piers of the Intercolonial Railway at Halifax during 1911 exceeded that of 1910 by nearly 100 per cent, thus compelling the company to extend its wharves and piers to meet future demands. The expense of this improvement will, it is said, approach \$5,000,000. Five piers will be built of reinforced concrete and creosoted-wood sheathing, all of the most permanent character. Two of these piers will have a length of 800 feet and a width of 235 feet, and will afford three times the present capacity. There will also be changes made in the railway passenger station, and the freight yards will be enlarged to accommodate at least 1,000 more cars than at present.

There arrived at the port of Halifax last year 46,801 immigrants, of whom 43,293 were destined for Canada and 3,508 for the United States.

Halifax as an ocean port has developed wonderfully during the past 10 years. There are 16 steamship services, outside of coastal, in communication with this port. During the winter season 1,000 to 1,200 men are employed on the piers. A fast-line service between Halifax and England is contemplated, the voyage from port to port to occupy four and one-half days. These steamers will be met by fast trains so as to land passengers from London to Winnipeg within seven days. It is also stated in this connection that the Intercolonial Railway is to be double-tracked and that Canadian Pacific trains will run over this line from St. John to Halifax.

The total number of vessels entering the port of Halifax during last year was 1,110 of 1,474,372 tons, of which only 8 steam vessels, of 8,458 tons, and 81 sailing vessels, of 19,855 tons, carried the American flag.

SYDNEY.

[By Consul Charles M. Freeman.]

Sydney, with a population of 20,000, claims to be the third city of eastern Canada. Within a 12-mile radius, the estimated population is 75,000, and the capital invested in industries within this radius is over \$100,000,000, the wages paid amounting to some \$12,000,000 a year. Four banks cater to the financial needs of the community and the populace may be reached through the advertising mediums of the daily newspapers and 2 weeklies. During 1911 some 2,000 steamers and sailing vessels, of 1,250,000 tons, entered the port of Sydney.

The coal mines of Cape Breton form a basis for the iron and steel works, and upon these latter depend other large industries. Cement is made from the blast furnace slag and lime, bricks are made from the slag, and tar, other chemicals, and fertilizers are obtained from the waste of the iron works. The 1911 output of the local makers of machinery and metal goods showed a large increase over 1910, and extensions to some of the plants are contemplated. The local electric company, which is owned chiefly by Americans, reported the best business of its history during 1911. Improvements costing over \$150,000 were made to the company's equipment during the past year.

Coal Output Increased.

The production of the collieries of Cape Breton during 1911 was greater than during 1910, although work was suspended in some of the mines on account of water or unusual accidents. Outside of the coal used locally, the greater part of the output is sent to Upper Canada, via the St. Lawrence River. During 1911 coal to the value of \$617,172 was exported to the United States.

The following table gives a comparison of the output in tons of the principal collieries during 1910 and 1911:

Company.	1910	1911	Company.	1910	1911
	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>
Dominion Coal Co. (Ltd.)...	3,527,000	4,000,000	North Atlantic Coal Co. (Ltd.).....	80,000	92,000
Nova Scotia Steel & Coal Co. (Ltd.).....	815,000	780,000	Port Hood Co.....	78,000	Closed.
Inverness Railway & Coal Co. (Ltd.).....	272,000	280,000	McKay Mining Co.....	25,000	30,000
			Colonial Coal Co.....	16,000	15,000

The decreased output of the Nova Scotia Steel & Coal Co. (Ltd.) was caused by a disastrous explosion at one of its most active collieries in January, 1911, which closed that plant for several months.

One coal company has undertaken the building of a new shipping pier at Sydney, the addition of new cars and locomotives for its road to Louisburg, the construction of a coal washer of the most improved design, and is installing a briquet plant to increase the value of its slack coal. Another company has recently erected a dock-loading plant and pocket of 40,000 tons capacity, with an electric loading belt having a capacity of 3,000 tons per hour.

Growth of the Iron and Steel Industry.

The iron and steel companies showed considerable increase in the volume of business done in 1911, compared with the previous year. During the past year the Nova Scotia Steel & Coal Co. installed a quantity of new equipment, including a fluid steel compression plant comprising four hydraulic presses capable of handling ingots of 3 and 5 tons weight, and one hydraulic press handling fluid ingots of 20 tons or more. These presses are of French invention, the first to be installed in Canada. In a new hydraulic-forge building will be placed two presses, one of which will be capable of handling ingots up to 50 tons in weight.

The output of the iron and steel companies of Sydney during 1911 was as follows:

Class.	Tons.	Class.	Tons.
DOMINION IRON & STEEL CO.		NOVA SCOTIA STEEL & COAL CO.	
Coke.....	454,000	Coke.....	97,971
Pig iron.....	272,000	Pig iron.....	84,166
Steel ingots.....	224,000	Steel ingots.....	84,503
Steel blooms.....	280,000	Steel billets.....	78,389
Steel rails.....	137,000		
Steel rods.....	77,000		
Sulphate of ammonia.....	4,000		

According to the statement of the general manager of one of the local steel companies, prices were extremely low during 1911, owing

to the depression in European markets and the demoralization of the American trade during the latter months of the year. Canadian iron and steel makers were forced to meet dumping conditions and reduce prices abroad, or curtail their operations and output. It is estimated that more than half of the iron and steel consumed in Canada is still imported from abroad. Canada is to-day using about 1,750,000 tons of steel annually.

Fisheries.

Nova Scotia led all the Provinces of the Dominion in the production of fish during 1911, with a total value of \$10,000,000, and Cape Breton contributed its share to this total. The catch prepared for market on Cape Breton during the fiscal year ended March 31, 1911, was valued at \$944,801, the estimated value of the catch when landed being \$737,408. This total was made up of cod, \$283,027; haddock, \$147,179; herring, \$59,005; lobsters, \$250,041; mackerel, \$60,550; salmon, \$29,531, and other fish, \$115,468. The catch for the nine months ended December 31, 1911, was valued as follows: Cod, \$243,459; haddock, \$101,029; halibut, \$9,289; herring, \$32,927; lobsters, \$221,273; mackerel, \$40,378; salmon, \$23,837, and other fish, \$53,787; total, \$725,967. In the fisheries of Cape Breton were engaged 100 deep-sea vessels of 1,975 tons, 2,642 small sail boats, 54 gasoline boats, and, in all the branches of the industry, 6,120 men. Of a total of \$159,166 paid in bounties to fishermen by Canada, the Cape Breton fishers received \$20,447.

The increasing use of motor boats in the shore fisheries is noted as an important development. Several steam trawlers fished from different ports in the district with fair success, and the fleet will be augmented during the coming season. More sea products were exported to the United States during 1911 than usual, as a result of high prices. Several Gloucester firms employed buyers throughout the district, contracting for green salt cod. According to the annual report of the Department of Marine and Fisheries for 1910-11, the total revenue from licenses, fines, etc., in all Canada amounted to \$100,876, of which American vessels contributed \$15,077 as *modus vivendi* fees. This sum was paid chiefly in Nova Scotia ports by vessels from Gloucester and Boston.

Imports into the District.

The entire value of imports into the Sydney consular district during 1911 was \$2,257,500, of which the United States supplied \$1,108,345. During 1910 the imports from the United States amounted to \$910,159. The articles showing the greatest increase among the imports of 1911 were beer, electrical goods, copper ingots, iron and steel manufactures, machinery, building materials, food supplies, and express and post parcels. Decreases were shown in the imports of chemicals, iron ore, railway supplies, and gasoline engines. The total exports from the Sydney district were valued at \$1,157,831.

Most of the gasoline engines imported were installed in locally built boats, and with the constantly increasing number of motor boats, both for fishing and pleasure purposes, the United States is not getting its share of this trade. The direct importation of jewelry

is small, but American goods of this class are obtained from Canadian importers in Halifax and other cities of the Dominion. The same remarks apply to groceries, glassware, hardware, musical instruments, and a number of other lines.

England, with a preferential duty, holds the market in jams, sauces, preserves, cotton, woolen goods, carpets, and linoleums, but it is believed that the imports from the United States of high-class clothing for ladies and gentlemen, fancy cottons, boots and shoes, hats and caps, could be greatly increased. The imports from the United States into the port of Sydney during 1911 were as follows:

Articles.	Value.	Articles.	Value.
Beer.....	\$12,326	Oils, lubricating and kerosene.....	\$9,676
Boots and shoes.....	4,940	Railway supplies.....	12,652
Bricks, fire.....	171,523	Ships' repairs.....	14,104
Chemicals.....	28,455	Stone.....	2,030
Clay and sand, fire.....	12,674	Tiles.....	8,600
Copper and brass, and manufactures of.....	20,968	Vegetables.....	8,215
Cotton goods.....	3,596	Wearing apparel.....	5,703
Electrical supplies.....	26,481	Wood, and manufactures of:	
Engines, gasoline.....	1,086	Building materials.....	87,266
Foodstuffs.....	19,370	Other.....	1,237
Fruits and nuts:		All other articles.....	73,537
Fresh fruits.....	63,052		
Other.....	10,971	Total.....	1,108,345
Household effects.....	6,675		
Iron and steel, and manufactures of:			
Machinery.....	332,547		
Ore.....	67,220		
Other.....	104,461		

Trade of the Canso Agency.

Consular Agent Alfred W. Hart gives the imports from the United States to Canso as \$18,370 during 1911, an increase of \$2,670 over the preceding year, consisting of netting, anthracite coal, machinery, timber, rope, anchors, clams, compasses, meats, telegraph apparatus, engine oil, lamps, books, paper, glass floats, motor cycles, paints, sails, clothing, immigrants' effects, etc. Like 1910, 1911 was an off year for the fisheries of Canso, on account of the scarcity of bait fish, the use of such fish for food, the rough and changeable weather, and a marked scarcity of cod and haddock on the inshore grounds. The high prices of cod and haddock tended to offset the scarcity, but the inshore boats did not share in the profits to the same extent as the bank fishermen. The business in market and canned fish is being steadily developed here. The manufacture of glue and fertilizer also bids fair to grow. Dogfish were not as plentiful in this particular locality in 1911 as in past seasons, but a bountiful supply was obtained farther north.

Extensive surveys have been carried on in this county during the past season by Government surveyors, locating a railroad from Dartmouth to Guysborough, traversing the counties of Halifax and Guysborough. Branch lines were also projected to connect the road with Country Harbor and New Glasgow. It is generally believed that Canso will have to be included in the system, as it can furnish more traffic than any other port or place in the territory traversed by the lines. A large number of summer visitors are attracted here by the cool and pleasant climate, and a good summer hotel would

add to the number of such visitors. A new steamboat has been put on the route between Canso and Mulgrave.

Louisburg and Port Hawkesbury Consular Agencies.

Consular Agent Henry C. V. Le Vatte reports that the industrial conditions of Louisburg improved to some extent during 1911. The principal industries of this port consist of fishing, lobster canning, coal shipping, and small farming. Codfish, haddock, and pollock were about 20 per cent below an average catch, and lobsters 30 per cent. Salmon gave an average catch, but mackerel were not over 50 per cent of the average. Prices of all kinds of fish were above the average, particularly for lobsters. Fishers received \$5.50 per 112 pounds for lobsters for canning, the highest price paid previously being \$4.50. The shipments of coal to the United States increased 19,000 tons over those of 1910, and the shipments to local markets also showed a considerable increase, particularly from January to May.

The exports from Port Hawkesbury to the United States increased nearly \$18,000 during 1911. The gain over 1910 in the exports of sea products was \$29,444, and the decrease in coal \$11,769. Only one coal mine was in operation in this district during the past year.

Exports to the United States.

In the exports to the United States from Sydney, a decrease of \$462,904 in 1911 as compared with 1910 will be noted. This was made up almost wholly of rails shipped in bond through the United States to Canada, and was not, therefore, an actual export to the United States. The exports to the United States during 1910 and 1911, as invoiced at the Sydney consulate and its agencies, were as follows:

Articles.	1910	1911	Articles.	1910	1911
SYDNEY.			LOUISBURG.		
Ammonia.....	\$83,888	\$98,043	Coal, bituminous.....	\$587,338	\$613,978
Crocoote oil.....	66,769	56,638	Fish.....	880	15,336
Coal.....	37,936	2,391	All other articles.....	302	728
Fish:			Total.....	588,520	630,042
Lobsters.....	18,530	21,556	PORT HAWKESBURY.		
Other.....	8,075	25,411	Animals: Lambs.....	2,005	2,705
Furs.....	6,432		Coal.....	12,872	1,103
Gypsum.....	24,720	29,243	Fish:		
Household effects.....	5,183	2,825	Cod.....	10,431	13,978
Rails.....	450,092		Lobsters.....	65,189	81,642
All other articles.....	739	2,310	Mackerel—		
Total.....	702,964	238,417	Fresh or frozen.....	12,289	9,147
CANSO.			Salted.....	5,605	15,031
Fish:			Salmon.....	6,203	6,750
Cod.....	18,765	21,181	Other.....	3,126	5,435
Lobsters.....	8,160	3,522	All other articles.....	7,197	5,925
Mackerel.....	7,708	4,918	Total.....	124,917	141,722
Other.....	3,570	5,906			
Fertilizer material.....		3,598			
Metal scrap.....	4,492	357			
Oil.....	8,801	5,086			
All other articles.....	1,065	1,011			
Total.....	52,561	45,579			

American goods returned to the United States from Sydney in 1911 were valued at \$5,038, from Port Hawkesbury \$300, and from Louisburg \$19.

YARMOUTH.

[By Consul Alfred J. Fleming.]

The trade of the consular district of Yarmouth during last year showed a slight improvement over 1910. The imports into the port of Yarmouth were valued at \$697,613, a gain of \$5,915, and the total exports amounted to \$4,455,124, a gain of \$14,530. Of the total imports in 1911, articles valued at \$554,124 came from the United States, a gain of \$3,062 over the previous year. The exports to the United States, according to customs statistics, were valued at \$865,127.

Apple and Berry Crops, and Shipments.

The apple crop of the counties of Digby and Annapolis, which include a large portion of the apple territory of the Province, was the largest in the history of Nova Scotia. The dry season, however, had an injurious effect upon the agricultural industries of the Province, the hay crop, which is one of the best yielders of the district, being about one-half the average.

In the Digby and Annapolis districts about 1,510,000 barrels of apples were produced, and toward the end of January of this year there remained to be shipped 600,000 barrels. Not exceeding 10,000 barrels were shipped to the United States from the district, most of the exports going to London, Glasgow, Liverpool, Bristol, and Hull, England, and to Hamburg, Germany, and about 100,000 barrels to South Africa. The average price of the apples was \$2 per barrel. The barrel makers were unable to supply the demand, and thousands of barrels were brought in from other parts of Canada. Barrels sold, wholesale, at 25 to 40 cents each, and the average price for the season was 33 cents.

The berry crop for 1911 was practically a failure. The number of crates of blueberries shipped to the United States in 1910 was 12,000, selling at \$2 per crate. In 1911 only about 6,000 crates were shipped, but the average price was about \$2.50 and the fruit was not so good. The exports of strawberries to the United States amounted to about \$12,000.

Shipments of Eelgrass—Canning Industries.

During the year about 500 tons of eelgrass were exported from this port to the United States and sold here at \$10 to \$12 per ton. There were fully 500 tons under cover for the 1912 market at the beginning of this year.

There are in this consular district about 20 lobster-canning factories, and during 1911 about 30,000 cases were canned for export out of the country, against 26,000 cases in 1910. Last year the home demand increased greatly, Canadian jobbers taking the entire output of some of the canneries. There are a number of firms in this consular district engaged in fish drying, and it is estimated that 200,000 pounds, valued at \$843,000, of dried, salted, and smoked fish were shipped from the counties of Shelburne, Yarmouth, and Digby during last year.

Output of Manufacturing Establishments.

There are four manufacturing establishments in Yarmouth which employ a large number of hands. These are boot and shoe making, cotton mill, iron works, and wood-working establishments. The

smaller enterprises include a knitting factory, a cigar factory, and small foundries, etc. Throughout 1911 the four larger establishments employed about 700 people. The average wages in the shoe factory were \$8, the woodworking and the iron works \$10. The total value of these four manufacturing enterprises is estimated at \$500,000, and the output of manufactures for 1911 was about \$1,250,000.

The cotton mills consumed 2,425,000 pounds of raw cotton, all of which came from the United States, the average price being \$11.70 per hundredweight. The total value of the manufactured product was \$522,000, consisting principally of white ducking of various grades. A number of new machines were installed during last year, and the company expects to add to the equipment during the present year.

The iron works employ 75 to 100 hands, and the output consists principally of engines, stoves, ships, etc. Last year seven ships, ranging from 50 to 1,000 tons were constructed.

During the middle of last year one of the two shoe-manufacturing establishments in Yarmouth moved to Truro, and in consequence the remaining factory was enlarged. During 1911 this factory turned out 70,000 pairs of shoes, most of these being sold in Canada. Some shoes were also exported to South America. At the end of the year the stock on hand was valued at \$20,360. Large improvements are in contemplation for 1912, and a new and much larger building will be occupied and the number of employees increased to about 125.

The output of the woodworking factory is chiefly office and store furnishings and house-building material. The plant is valued at \$50,000, and a good business is done. Considerable amounts of hardwood are imported from the United States, but the sales are confined to Canada. This factory employs an average of 30 hands.

Lumber Cut, Price, and Shipments.

The lumber cut during last year in the four counties comprising this consular district—Yarmouth, Digby, Annapolis, and Shelburne—was about 70,000,000 feet. The average price of lumber was \$17.50 per thousand, and lath \$2.50; wood was \$4.50 per cord f. o. b. There are in the 4 counties 70 sawmills, more than half of these being portable mills. Of the total cut of lumber, 7,000,000 to 8,000,000 feet were shipped to the United States.

The past winter was an exceedingly good one for the lumber industry, with plenty of snow and ice, and the woods lively with cutters. It was reported that up to the end of January the cut in the woods was at least 15 per cent better than for the same period in the previous winter, which was one of the best of recent years. The lumber in this district is spruce, hemlock, pine, and hardwood, and the first two take in more than two-thirds of the total cut of about 70,000,000 feet. About 25,000,000 lath were cut in the district, and these, selling at an average of \$2.50 per thousand were exported mostly to the United States. Ten to twelve millions of shingles were cut, but few of these were exported, home demands consuming them at about \$1.50 to \$1.75 per thousand.

Building Operations, Harbor Improvements, and Shipping.

The building operations in Yarmouth during 1911 amounted to about \$50,000. Two new bank buildings will be erected this summer at a cost of about \$20,000 each; the telephone company will erect a

new office building; several other buildings are in contemplation; and \$10,000 will be spent in enlarging the new shoe-factory building.

During last year 32,416 people arrived in Yarmouth from Boston on the regular ships, against 31,405 in 1910. The arrivals were mostly during the summer months.

The Dominion Government has appropriated \$100,000 for the dredging of the Yarmouth harbor, which work was to be commenced early in the present summer. The Dominion and Atlantic railroad and steamship service between this place and Boston and Halifax having passed into the hands of the Canadian Pacific Railroad Co., there is a great deal of speculation as to improvements, new boats, and better service.

During last year 2,588 vessels entered and cleared this port, as follows: 2,167 Canadian, 381 American, and 40 other countries. The total tonnage was 476,078, of which 410,710 was Canadian and 26,101 American.

Imports into Yarmouth.

The total imports at the port of Yarmouth during 1911 were valued at \$697,613, against \$691,698 for the preceding year. The articles coming from the United States were valued at \$554,124, a gain of \$3,065 compared with 1910. The following table shows the total value of the principal articles imported and the share of the United States in the trade:

Articles.	From United States.	Total.	Articles.	From United States.	Total.
Automobiles.....	\$5,000	\$5,000	Oils:		
Bicycles.....	3,600	3,600	Kerosene and gasoline....	\$11,640	\$11,640
Books and stationery.....	17,200	17,200	Other oils.....	23,620	23,611
Coal.....	62,000	62,000	Leather, and manufactures of.....	4,501	8,018
Cottons.....	207,200	229,827	Live stock.....	19,000	19,300
Fruits.....	37,122	39,322	Marble, and manufactures of.....	4,600	4,600
Foodstuffs.....	60,391	70,992	Metals.....	12,136	34,313
Furniture.....	11,127	11,688	All other articles.....	10,567	58,072
Iron, and manufactures of.....	64,220	93,340	Total.....	554,124	697,613

Exports to United States.

The value of the exports to the United States, as invoiced through the American consulate at Yarmouth and the agencies at Annapolis Royal and Digby during 1911, was \$478,921, a gain of \$1,688 over the preceding year. The principal articles and their value for both years were as follows:

Articles.	1910	1911	Articles.	1910	1911
Apples.....		\$2,735	Junk.....	\$1,168	\$1,174
Cotton waste.....	\$3,980	5,528	Lobsters:		
Eelgrass.....	2,917	2,393	Canned.....	59,828	47,123
Fish:			Live.....	14,685	25,228
Cod.....	61,562	136,238	Wood, and manufactures of:		
Haddock and hake.....	11,849	11,135	Lath.....		17,686
Halibut.....	6,032	31,922	Lumber.....	183,400	105,400
Herring.....	5,529	4,402	Piling.....		36,247
Mackerel.....	4,046	1,888	Pulp.....	72,421	15,604
Fish oil.....	5,073	1,112	All other articles.....	18,524	23,713
Furs, raw.....	5,977	8,050	Total.....	477,233	478,921
Household effects.....	9,239	1,344			
Iron ore.....	11,003				

AMUSEMENT PARK APPARATUS.**ENGLAND.**

[From Consul Samuel M. Taylor, Nottingham.]

At present there is nothing in the nature of a "switchback" scenic railway or roller coaster in operation in Nottingham, nor is there a park, such, for instance, as River View Park at Baltimore.

There are, however, several parks for the recreation of the public, some of them of considerable extent. In most cases they are simply open spaces of trees and grass, sometimes planted with flower beds, offering the younger population opportunities to engage in games and sports. Refreshment rooms are generally provided, selling various kinds of drinks. These parks, with their areas, are: Arboretum, 19 acres; Colwick Hall, 292 acres; The Forest, 70 acres; Bulwell Hall Park, 245 acres; and Bulwell Forest, 115 acres.

Colwick Hall and grounds and Bulwell Hall Park were once the residences of wealthy families. Colwick Hall is now the property of the Home Brewery Co. (Ltd.), of this city. It is a short walk beyond a street railway terminus and is also reached by steamers leaving every 15 minutes during the summer from Trent Bridge, another electric car line terminus. Small theatricals are given in the park, taking the form of Pierrot shows; in the Hall there are a dining-room, a public dancing hall, and several bars. Adjoining this park is a race course, where the Nottingham races are held six or eight times annually. Colwick Park probably offers the best opportunity for a roller coaster, but it should be of limited size.

City-Owned Parks—The Outlook.

The other parks are the property of the city. The Arboretum is located in the better residential quarter of town and closely planted with trees and flower beds. The Forest is near by and is chiefly a place for athletic practice. Bulwell Hall Park and Bulwell Forest are adjacent to a golf course, but are at the extreme northern end of the city, near extensive collieries and surrounded by the living quarters of the very poor. Other grounds belonging to the city are at Trent Bridge and along the Trent, where there is a drive and open ground known as the Victoria Embankment.

Questioned as to the availability of the municipal grounds for amusement purposes, the town clerk replied that he could not give an off-hand answer, but that if a definite offer were made to lease grounds for a term of years, say about five, he would bring it before the town council and it would probably be acted upon favorably.

With regard to the chances of successfully inaugurating a roller coaster or scenic railway here, I have interviewed the town clerk, the solicitor to the corporation (or city attorney), and an ex-mayor, who is a capitalist with large interests in city and suburban property. Their opinions agree that while a roller coaster or scenic railway might be well patronized for a year or two, its popularity would be ephemeral and not likely to outlast a season or two. A "switchback," to use the local term, was in operation at what was known as The Exhibition, a resort opened seven or eight years ago at Trent Bridge, at the populous southern end of the city, where three or four electric car lines have their chief terminus. In connection with this exhibi-

tion there were various devices, such as a maze, a switchback, a scenic railway, a water chute, and a Canadian toboggan. The city leased the ground to the operators for a term of five years, but the venture failed at the end of two. A previous undertaking of the same kind was also unsuccessful.

Patronage Must Come from Permanent Population.

Various reasons tend to make Nottingham unsuitable for such enterprises. The population of the city is 260,000 and as a whole may be described as prosperous and industrious, but there is no floating population. Sightseers are very few in number and holiday makers are unknown; practically no one comes here on vacation. A scenic railway would therefore have to depend for its patrons upon the city's fixed population, an element that soon tires of the same amusement. This feature was largely responsible for the failure of The Exhibition. Moreover, the summers here are very uncertain. Often the weather remains damp and cold throughout the season; and one or two such summers, when many persons would be disinclined to use a roller coaster or scenic railway, would react unfavorably upon the chances of a profit.

I may say that it has been the general experience in England during the last five years that while scenic railways are still successful in favorable localities, such as seaside resorts, the switchback is quite out of date. The public is well acquainted with both varieties, and neither would be looked upon as a novelty.

BELGIUM.

[From Consul General Henry W. Diederich, Antwerp.]

In the Antwerp consular district there is no pleasure park or amusement resort similar to those in the United States. These amusement resorts are generally established within the premises of the frequent world's fairs held in this country, but their life ends with that of the exhibition. I understand, however, that after the Brussels Exhibition of 1910 some of the attractions of what was known there as Luna Park were continued during the following summer.

Brussels, in my opinion, is the only city in this country at present able to make an amusement park pay; but in order to do any business with a company establishing such an enterprise, American concerns should certainly have a representative on the spot ready to jump in at the right moment. For instance, when the Brussels Exhibition of 1910 was being organized, Americans in Brussels immediately busied themselves in view of the establishment of Luna Park and induced a large number of American attractions to come to the exhibition.

Another international exhibition is now in course of preparation in Ghent, to be held early next year.

GERMANY.

[From Consul General Frank D. Hill, Frankfort on the Main.]

There is no regular amusement park at Frankfort, although there is a very large roller skating rink, which was opened by an American concern, but has since passed into German hands.

In spring and fall, when the formerly well-visited fairs are held here, permits are often issued for erection of temporary merry-go-

rounds, roller coasters, etc. These permits are issued to traveling concerns, which visit the leading cities much as circuses do in the United States.

A roller coaster was here last fall but has since been taken down and sent on to the next stop. This office is advised that this roller coaster, like most of the apparatus of this kind used in Germany, was built by a firm in Gotha.

INDIA.

[From Consul Edwin S. Cunningham, Bombay.]

There are in Bombay no pleasure parks similar to those in the United States, but amusement resorts are well known. These, however, exist more at the time of a special exhibition or fair than they do at fixed places.

Recently there was an Old Bombay Exhibition, at which was erected the first scenic railway that had been known in this city. It was erected by the promoting company of the exhibition, but at the close of the exposition the scenic railway is being continued, though I think it is doubtful whether it will remain here any great length of time. It is the hope of the promoting company to dispose of it and wind up the exposition finances.

The scenic railway has appeared to be popular in spite of a few accidents which have occurred; therefore it is more than likely that another will replace the one that is here, in the event that this one is removed to some interior city.

People Fond of Amusements.

It would seem that this would be a very favorable market in which to sell. The Indian people, both the Anglo-Indian and native, are keen on amusements of various kinds, as much so as in other parts of the world; and with a favorable introduction it is not unreasonable that a scheme of this kind would be profitable. Not only is this true in Bombay but in other larger cities of this Empire. It is true that a great number of the people are very poor, but of the money they have they are glad to spend some on amusements; and if, as seems likely, the scenic railway should become popular, then this should prove a very profitable scheme.

I know of no company interested in procuring a new scenic railway, but there have been a number of inquiries received at this office for smaller amusements, such as merry-go-rounds, illusions, etc., and it is the intention of the inquirers, should they buy, to transfer these various amusements from place to place at such time as there exists a fair or exhibition, or some other festive occasion, of which there are a great number in India.

German Foreign Investments.

Consul George Nicolas Ifft, of Nuremberg, states that mortgage loans upon foreign realty would not be considered by German financial institutions. Several large ones such as the Deutsche Bank, the Dresdner Bank, and the Darmstadter Bank do reach out for considerable foreign business, but mostly in financing German commercial undertakings abroad. They always have money for this purpose, but the men at the head and in control of such enterprises are almost invariably Germans.

ALASKA'S COMMERCE AND INDUSTRIES.

In the discussion before the House of Representatives of a bill to create a legislative assembly in Alaska, Delegate James Wickersham presented statistics relative to the commerce and industries of that Territory. The following extracts are from the Congressional Record's report of Mr. Wickersham's remarks:

Agricultural Possibilities.

The agricultural capacity of Alaska is surprisingly large to those who have never considered it. The Alaskan agricultural bureau has made a careful examination into the area of arable soil and has announced that there is more agricultural land in the Tanana Valley than there is under cultivation in Norway, Sweden, Finland, and the three northern Provinces of Russia. A study of the topography, climate, native plants, etc., shows that the conditions are not very dissimilar in the two regions, whatever advantage there is in climate being probably in favor of the European countries.

In Europe, within the limits of 58° and 70° north latitude are embraced about 599,450,000 acres. The area reported under cultivation varies from less than 0.91 per cent in Archangel and 0.5 per cent in Norway to 4.1 per cent in Sweden. In Finland, Vologda, and Olonetz only about 1 per cent of the total area is in cultivation, as the term is commonly used. In nearly every country there are natural meadows of large extent used as pasture and for haymaking, so that the total under agricultural use is probably double the figures quoted.

On a basis of 1 per cent of the total area available for crops and 2 per cent for crops, pasture, and haying, there should be over 3,650,000 acres capable of cultivation or 7,300,000 acres available for possible agricultural development in Alaska. In 1894 the Director of the United States Geological Survey estimated the area of tillable land in southeastern Alaska, in the Cook Inlet country, the Alaskan Peninsula, and adjacent islands at 2,000,000 to 3,000,000 acres. In 1900, after traveling repeatedly throughout Alaska and comparing estimates from various sources, Prof. C. C. George-son estimated the tillable and pasture land of Alaska at 64,000,000 acres. In 1910 Mr. J. W. Neal, who is in charge of the agricultural experiment station near Fairbanks, made a reconnaissance survey of the Tanana Valley, and he estimated the agricultural and grazing lands of that valley and the small valleys leading from it as about 9,700,000 acres, or more than the total area reported under crops in the specified countries of Europe. With the same development of agriculture in Alaska as in Europe to supplement its mining, fisheries, and other industries, Alaska should support a population almost equal to that of Europe north of 60° latitude. All the crops which can be raised in Norway, Sweden, Finland, and the northern Provinces of Russia—potatoes, root crops, barley, oats, carrots, beets, turnips, celery—can be produced in Alaska.

One farmer in the Tanana Valley secured the following results from his harvest of 1909: Three acres of potatoes yielded 18 tons, the market price being \$120 per ton; 1 acre of beets, 8 tons; 2 acres of carrots, 7½ tons, market price, \$140 per ton; 1 acre of turnips, 8 tons, at \$80 per ton; ¼ acre of rutabagas, 2½ tons, for which the market price was \$100 per ton; ½ acre of red beets, 1 ton, at \$140; and in, addition, he states: "I had 15 acres of barley which I cut for hay. I had 3½ tons which I sold for \$75 per ton and still have enough left for my own use for the winter. I raised 2 tons of cabbages, which I put away for the winter, besides which I sold between 3½ and 4 tons during the summer at an average selling price of \$140 per ton."

Trade with the United States.

Alaskan commerce with the United States for the last eight fiscal years has aggregated: In 1904, \$49,244,606; 1905, \$56,633,701; 1906, \$55,873,942; 1907, \$65,207,986; 1908, \$47,950,873; 1909, \$55,840,971; 1910, \$60,220,132; 1911, \$55,924,404. This gives an annual average for the period of \$55,862,077. Contrasting this average with the average trade of Hawaii and Porto Rico and 42 selected foreign countries with the United States, shows that China is the only one in the list whose trade exceeds that of Alaska: Alaska, \$55,862,077; China, \$56,402,715; Hawaii, \$51,487,809; British India, \$50,887,709; Scotland, \$49,781,945; Porto Rico, \$45,734,534; total British Australasia, \$44,655,821; total Africa, \$36,125,980; Spain, \$33,320,286; total Russia, \$32,917,181; Russia in Europe, \$30,838,704; Ireland, \$29,387,114; Austria-Hungary, \$28,848,050; British Columbia, \$28,410,635; Switzerland, \$24,247,694; Chile, \$23,815,162; Philippine Islands, \$23,406,380; British West Indies, \$21,948,279;

Denmark, \$19,007,892; Nova Scotia, New Brunswick, and Prince Edward Island, \$18,545,243; Dutch East Indies, \$16,970,057; Panama, \$15,473,172; total Turkey, \$15,209,728; Egypt, \$13,824,282; Sweden, \$12,702,708; Colombia, \$11,057,739; Hongkong, \$10,457,647; Peru, \$10,456,145; Venezuela, \$10,453,152; Norway, \$10,120,280; New Zealand, \$9,306,044; Portugal, \$8,648,746; Turkey in Europe, \$7,517,785; Costa Rica, \$6,631,232; Uruguay, \$6,507,280; Santo Domingo, \$6,034,066; Guatemala, \$5,049,635; Newfoundland and Labrador, \$4,661,239; Ecuador, \$4,653,404; Haiti, \$4,519,341; Honduras, \$3,873,993; Nicaragua, \$3,150,240; Greece, \$3,129,991; Salvador, \$2,556,710; and British Honduras, \$2,027,458.

Dividing the total trade of Alaska for the year 1910 by the total number of white people shown by the census to inhabit the Territory, it will be found that each white Alaskan in that year was worth \$1,487.75 in trade with the United States. If to the white population are added all the Indians—men, women, and children—then each inhabitant in Alaska was worth \$839.85. By the same analysis each Hawaiian in 1910 was worth \$347.78, each Porto Rican \$52.95, and each Filipino only \$4.13. In other words, every white man, woman, and child in Alaska was worth 4.3 Hawaiians, or 28 Porto Ricans, or 360 Filipinos.

Population—Dates of Settlement.

By the census of 1910 Alaska's population is 64,356. This is apportioned among the various races: White, 36,347; Indian, 25,331; Negro, 209; Chinese, 1,209; Japanese, 913; and all other, 347.

The dates at which some of the older towns were settled, and their population in 1910, appear in the list below:

Towns.	Date settled.	Population, 1910.	Towns.	Date settled.	Population, 1910.
Unalaska.....	1778	281	Skagway.....	1897	872
Kenai.....	1791	250	Yakutat.....	1898	271
Kodiak.....	1792	438	Nome.....	1898	2,600
Sitka.....	1799	1,039	Eagle ¹	1898	178
Afognak.....	1825	318	Fort Gibbon.....	1898	398
St. Michael.....	1833	415	Valdez ¹	1898	810
Wrangell ¹	1834	743	Circle City.....	1899	144
Nulato.....	1838	230	Petersburg ¹	1899	585
Fort Yukon.....	1847	321	Seward.....	1900	534
Juneau ¹	1880	1,644	Ellamar.....	1900	98
Treadwell ¹	1881	1,222	Fairbanks ¹	1902	3,541
Haines ¹	1881	465	Chena ¹	1902	138
Douglas ¹	1888	1,722	Cordova ¹	1906	1,152
Metlakathla.....	1888	602			
Ketchikan ¹	1892	1,613	Total population 30		
Unga.....	1894	108	Alaska towns.....		23,271
Karluk.....	1895	549			

¹ Incorporated towns which increased in population from 1900 to 1910.

Four Judicial Districts Equal in Population and Trade.

Alaska's population is distributed among the four judicial districts as follows: First judicial district, 15,216; second, 12,351; third, 20,078; fourth, 16,711. Not only is the population of the districts fairly equal in number, but the customs returns also show how nearly equal are the imports of merchandise from the United States into the four divisions. The following figures were compiled from the customs report of 1911:

Imports.	Fiscal year ended June 30—				
	1907	1908	1909	1910	1911
Juneau division.....	\$4,233,428	\$4,513,006	\$5,386,437	\$4,439,244	\$4,733,525
Valdez division.....	2,968,515	4,235,080	4,256,676	5,303,831	4,021,550
Nome division.....	5,958,731	3,964,548	3,788,784	3,864,219	3,759,275
Fairbanks division.....	4,650,419	3,244,933	3,754,548	4,385,353	3,222,160
Total.....	17,811,093	15,957,576	17,186,445	17,972,647	15,736,510

Then, too, the wealth created in and exported from each of these four divisions to the United States is as nearly equal as the population and the distribution of the imports. The following table shows how equally the wealth originating in Alaska in

1911 was divided between them. The table holds good, approximately, for the preceding years for a decade:

Divisions.	Products.	Value	Total
1 Juneau, southeast Alaska.....	Gold..... Fish and furs..... Marble—gypsum.....	\$4,250,000 8,464,227 215,485	\$12,929,712
2 Nome, west Alaska.....	Gold..... Fish and furs.....	3,125,000 5,128,234	
3 Valdez, central Alaska.....	Gold..... Fish and furs..... Copper.....	475,000 3,260,558 2,898,885	
4 Fairbanks, interior Alaska.....	Gold.....	9,300,000	9,300,000
Total specified exports, Alaska, 1911.....			37,117,339

Mineral Output.

In the 21 years from 1880 to 1911 Alaska's mineral output has amounted to \$206,813,594, the value for certain of these years being set forth in the annexed summary:

Years.	Gold.	Silver.	Copper.	Gypsum, marble, and tin.	Coal.	Total.
Total production, 1880 to 1911.....	195,916,520	1,500,441	8,237,594	820,850	338,189	206,813,594
1880.....	\$20,000		\$826			\$20,826
1883.....	301,000	\$11,146				\$12,146
1888.....	850,000	2,181				852,181
1893.....	1,038,000	6,570				1,044,570
1896.....	2,861,000	99,087			\$84,000	3,044,087
1898.....	2,517,000	54,575			14,000	2,585,575
1900.....	8,166,000	45,494			16,800	8,228,294
1901.....	6,932,700	28,598	40,000		15,600	7,016,898
1902.....	8,283,400	48,580	41,400		19,048	8,392,438
1903.....	8,683,000	77,843	156,000		9,782	8,927,225
1904.....	9,160,000	114,934	275,676		7,225	9,557,835
1905.....	15,630,000	80,165	749,617		13,250	16,473,032
1906.....	22,036,794	136,345	1,133,360		17,974	23,324,373
1907.....	19,349,743	98,857	1,261,757	\$125,644	53,600	20,889,601
1908.....	19,292,818	71,906	605,367	141,348	14,810	20,126,149
1909.....	20,411,716	76,934	536,211	168,747	12,300	21,205,908
1910.....	16,126,749	85,239	538,085	169,626	15,000	16,935,309
1911.....	17,150,000	120,000	2,898,385	215,485	(?)	20,484,370

¹ Estimated.

² Not available.

The Salmon Pack.

Out of the 87,037,884 cases (of 48 one-pound cans each) of salmon canned upon the Pacific coast since 1864 only 15.02 per cent was canned in the State of Washington, 20.11 per cent on the Columbia River, 2.28 per cent in Oregon, 1.66 per cent in California, 19.12 in British Columbia, and 41.81 per cent in Alaska. The salmon of Alaska are more valuable in proportion to the pack than in any of the other districts on account of the fact that Alaska produces a larger proportion of the higher-grade fish. The pack (cases) of canned salmon on the Pacific coast, by years and waters, for certain years from 1864 to 1911 is summarized below:

Years.	Washing-ton.	Columbia River.	Coastal streams of Oregon.	Califor-nia.	Alaska.	British Columbia.	Total
Total production, 1864 to 1911.....	13,070,452	17,503,530	1,983,770	1,445,674	36,389,737	16,644,721	87,037,884
1864.....				2,000			2,000
1866.....		4,000					4,000
1876.....		450,000		10,000		7,247	467,247
1877.....	5,500	380,000	7,804	30,000		58,357	451,661
1878.....	5,658	460,000	16,634	48,974	8,159	89,946	629,191
1879.....	81,475	372,477	92,863	74,822	412,115	184,040	1,217,792
1889.....	433,720	487,944	75,679	29,731	965,097	492,551	2,484,722
1900.....	526,550	358,772	12,237	39,304	1,548,139	606,540	3,091,543
1902.....	652,651	317,143	44,236	16,543	2,536,824	627,161	4,194,558
1904.....	345,447	395,104	98,874	17,807	1,953,756	465,894	3,276,882
1906.....	467,042	394,898	107,332		2,219,044	629,460	3,817,776
1907.....	725,462	324,171	79,712		2,199,873	547,459	3,846,617
1908.....	483,222	263,341	52,478		2,606,973	586,303	3,962,317
1909.....	1,664,760	274,087	58,109	5,633	2,396,477	993,090	5,391,186
1910.....	633,521	391,415	103,617	14,016	2,413,054	760,530	4,816,133
1911.....	1,644,550	643,331	153,828	11,746	2,520,066	948,965	6,122,486

Fisheries and Furs.

The catch of Alaska's fishermen and trappers since 1868 has totaled in value \$222,710,036, the returns for certain years of this period being shown in the following table:

Years.	Fur-seal skins.	Aquatic furs except seals. ¹	Furs of land animals.	Walrus and whalebone products.	Fishery products.	Total.
Total production, 1868 to 1911.....	51,835,143	12,496,063	8,350,290	2,075,463	147,953,077	222,710,036
1868.....	\$708,734	\$446,245	.....	.....	\$306,638	\$1,461,617
1878.....	1,110,145	437,555	\$140,394	.....	184,422	1,881,516
1888.....	2,298,204	523,205	232,185	.....	1,447,478	4,501,072
1898.....	474,320	86,225	81,372	.....	3,429,529	4,071,446
1900.....	1,282,096	86,225	147,633	.....	5,303,294	6,819,248
1902.....	1,180,306	37,167	240,589	.....	8,310,304	9,748,366
1904.....	620,940	37,167	126,829	.....	6,458,585	7,243,521
1905.....	762,120	* 232,230	182,326	* \$910,859	7,908,243	9,985,873
1906.....	756,757	30,369	108,049	196,838	8,524,572	9,616,383
1907.....	851,427	23,351	231,747	373,543	9,518,918	10,998,988
1908.....	822,970	31,828	323,480	148,382	11,140,161	12,466,821
1909.....	* 601,506	66,508	* 318,605	194,073	10,422,169	11,287,256
1910.....	* 473,207	111,790	* 318,605	136,791	12,650,191	13,371,979
1911.....	* 432,913	39,733	313,730	114,877	16,377,463	17,278,716

¹ The following data of the Bureau of Fisheries with respect to aquatic furs have been distributed by annual averages: 1868-1870, \$1,338,735; 1871-1880, \$4,375,551; 1881-1890, \$5,232,050; 1891-1900, \$862,250; 1901-1904, \$148,668.

² Includes hair seal, 1868-1905, which can not be accurately distributed by years.

³ 1868-1905.

⁴ Product of seal islands only.

⁵ Estimated.

Revenues from 1869 to 1911.

A statement of Government revenues from Alaska under specified heads and for certain of the fiscal years from 1869 to 1911 would be as follows:

Years.	Internal revenue. ¹	Customs.	Public lands.	Tax on sealskins.	Rent of seal islands.	Alaska fund ² and agricultural experiment station.	Miscellaneous.	Total.
Total, 1869 to 1911.....	290,242	1,061,430	472,622	8,855,659	999,900	1,173,550	1,019,062	14,702,465
1869.....	.....	\$18,504	.....	.....	.....	.....	\$317	\$18,821
1871.....	.....	4,097	.....	\$101,060	.....	.....	1,159	106,336
1873.....	.....	.....	.....	252,181	\$55,000	.....	672	307,853
1878.....	.....	4,816	.....	198,256	55,000	.....	1,265	259,336
1883.....	.....	2,857	.....	262,295	55,000	.....	1,587	321,739
1887.....	.....	3,263	\$375	262,453	55,000	.....	1,557	322,648
1890.....	\$1,962	6,927	750	262,500	.....	.....	18,862	291,001
1895.....	2,788	12,481	985	163,917	700	.....	8,647	189,518
1900.....	13,602	57,624	2,376	224,476	1,200	.....	195,659	494,937
1905.....	18,420	133,978	9,686	134,234	200	\$40,473	122,308	459,299
1906.....	18,349	77,878	13,818	146,913	100	161,011	115,493	533,562
1907.....	18,544	98,449	54,195	148,017	100	169,452	91,419	580,176
1908.....	15,724	70,440	17,183	153,007	100	207,220	116,033	579,507
1909.....	18,217	67,026	79,116	153,375	(³)	156,460	107,186	581,390
1910.....	20,333	56,348	131,264	153,375	(³)	260,907	112,374	734,601
1911.....	23,035	45,016	136,658	403,947	.....	178,027	114,562	901,165

¹ The Territory of Alaska was attached to the District of Oregon, Dec. 27, 1872, and on Sept. 1, 1893, Washington and Oregon were consolidated; again on Sept. 1, 1902, Washington and Alaska were detached from the District of Oregon and made a separate district.

² Act of Jan. 27, 1905.

³ Included under "Tax on sealskins."

The Alaskan Balance Sheet.

The Alaska balance sheet shows upon the one hand the total production of Alaska from 1867 to 1911, and upon the other hand the total cash disbursements made by the Government of the United States for every purpose in the Territory of Alaska from the date of purchase until 1911. Alaska has produced from 1867 until 1911, \$206,813,594 in minerals, and in sea and fur products the sum of \$222,710,036, and has

paid into the Treasury of the United States from customs, internal revenue and license taxes, and other cash items \$17,117,355, making a total production and export from Alaska to the United States of \$446,640,985.

On the other side of that balance sheet is the \$7,200,000 which the Government of the United States paid to Russia for Alaska; then the Treasury statements for the payments made from 1867 to 1911, inclusive, and the expenses of the post office. The total moneys expended by the Government of the United States in Alaska from 1867 to 1911 in maintaining the National Government there, collecting customs and the revenues, maintaining the courts, the fur-seal fisheries, boundary commissions, and generally all items of governmental expense, have amounted only to \$35,816,674. That leaves a difference between the productions of Alaska and the amount the Government of the United States has expended therein of \$410,824,311.

ITALIAN SHIPMENTS OF CARBON BISULPHIDE.

[From Consul Arthur Garrels, Catania.]

It may be of interest to American producers of chemicals to know that a shipment of 50 tons of carbon bisulphide has recently been made from Catania to the United States. This shipment, it is learned, is the forerunner of a monthly consignment of like amount.

This fact, coupled with several inquiries received from rubber manufacturers, induces the belief that a shortage in the supply of that product exists in the United States. When it is considered that there is a duty of 25 per cent on the product, that owing to its highly inflammable and explosive nature difficulties are encountered in finding vessels which will carry it, that the freight is \$18.25 per ton, that the containers (iron drums) are of two-thirds the value of the product and are subject to a duty of 45 per cent, it must be evident that the seeking of this product in a foreign market is hardly a matter of price, but is the result of inadequate production in the United States.

There is one establishment producing bisulphide of carbon at Catania. It began operations some 12 years ago to supply a local and neighborhood demand, where the article is used in extracting the oil remaining in the residue of olive-oil presses. Catania, being a sulphur center, was naturally a desirable location. The local concern quotes prices f. o. b. Catania as follows: \$5.98 per 100 kilos (220.46 pounds) for bisulphide of carbon, and drums (capacity 200 kilos, or 440.92 pounds) at \$7.72.

AMERICAN MONAZITE PRODUCTION AND IMPORTS.

The Geological Survey reports that practically no monazite was produced in the United States in 1911. A total of 13,132 pounds of crude sand was mined in North and South Carolina, but no shipments were made to the manufacturers. It is estimated that this crude sand would yield about 3,820 pounds of refined sand containing nearly 95 per cent of monazite. The 1910 production amounted to 99,301 pounds, valued at \$12,006, in contrast to 541,931 pounds, value \$65,032, in 1909.

Official records show that 705,149 pounds of monazite and thorite, valued at \$60,542, were imported for consumption into the United States in 1911, as compared with 458,788 pounds, value \$48,199, in 1910. The imports of thorium nitrate in 1911 amounted to 121,111 pounds, valued at \$238,841; in 1910, to 124,808 pounds worth \$219,615. [A previous article on monazite and zircon production appeared in Daily Consular and Trade Reports on October 20, 1910.]

BAHIA COMMERCIAL NOTES.

[From Consul Southard P. Warner, Bahia, Brazil.]

Increased Interest in Whaling at Bahia.

In view of the abundance of whales just off this coast every year from June until October, it is rather astonishing that a steam whaling vessel was never used here until last year, when one was brought here by a local whaling firm. This steamer killed more than 100 whales and its owners have purchased a second vessel for the coming season. A recently organized Norwegian company will also have at least two steam whalers at Bahia this year, so that the kill will doubtless be much greater than ever before. The number of whales killed within a radius of about 15 miles of this city last season was something over 200, of which more than 100 were killed by the steamer and the remainder by the fleet of rather primitive local sailing whaleboats.

The whales (*Balænoptera musculus*) occurring here belong to the family of rorquals and are characterized by very long dorsal fins and very pronounced longitudinal folds on the throat and forward part of the belly. The average length of those taken in these waters is about 40 feet, although much larger ones are frequently encountered. The largest whale ever killed here is said to have been about 70 feet in length and to have yielded more than 1,375 gallons of oil.

No use has yet been made of the bones of the whales taken here, except for building landing stages at the boiling-down stations. The plates taken from the mouth (whalebone) are left on the beach, as there is no market here for them in their crude state and apparently no attempt is made to treat or to export them. A considerable quantity of the oil obtained by boiling down the blubber is consumed locally, the remainder being exported to England. The exports of this oil from Bahia in 1908 were 1,114 metric tons, value \$43,500; in 1909, 727 metric tons, value \$28,500; and in 1910, 1,037 metric tons, value \$40,500.

American Well-Drilling Machinery.

The State of Bahia has purchased a number of American well drillers for use in those sections subject to drought at certain seasons. Five of these machines have already been assembled under the direction of an American sent here for that purpose and are drilling wells at various points along the Bahia-San Francisco Railway. The introduction of artesian wells should prove a boon to cattle raisers in many sections of this and neighboring States where cattle do not do well solely because of the scarcity of good water.

It is probable that the imports of well-drilling machinery at this port will increase quite rapidly from now on, but it will be impossible for American manufacturers to effect sales here by correspondence. All of the well-drilling outfits so far imported here are said to have been purchased through an agency in Rio de Janeiro.

Rubber Auction Rules in Ceylon.

Consul Charles K. Moser sends from Colombo a copy of the "By-laws and Conditions of Sale of Rubber by Auction," which were adopted by the Ceylon Chamber of Commerce on March 20, 1912, and which will be loaned to those interested by the Bureau of Manufactures.

THE LAUBEN KOLONIEN OF BERLIN.

[From Vice Consul General De Witt C. Poole, Jr., Berlin, Germany.]

A lauben kolonie consists of many small plots of ground each with a little hut varying from a covered arbor for shelter during thunderstorms to a rustic bungalow. The colonies are situated mostly on the outskirts of German cities. Owing to the rapid growth of Berlin, the settlements here are being constantly encroached upon and driven further into the woods.

The owners of unimproved land in the municipal environs suitable for these colonies rent their property to a lessee called in German "gross pächter." In the city of Schöneberg laws are in force preventing the city from renting out any of its own land for more than 50 pfennigs (11.9 cents) a year per quadrat rute (11.14 square yards). The lessee divides the tract into small parcels most of which are from 14 to 25 quadrat ruten (155.9 to 277 square yards), the average being about 20 quadrat ruten (223 square yards). They are marked off by streets. The Schöneberg law also provides that not more than 70 pfennigs (16.66 cents) per quadrat rute can be charged to the ultimate renter.

When the land is owned by private individuals they can make whatever arrangements they think best, but the rental is never very high. In some cases large private landowners give the land free with the provision that the renter must be ready to vacate without previous notice any time it is demanded, notwithstanding that the conditions of the crop would cause a financial loss. In return for this each colonist must undertake to keep his plot tidy, but the manner in which his garden is planted is left to his decision.

The Red Cross Association has also rented large tracts in various places a mile or so out of Berlin, at Heinersdorf, Rixdorf, and Reinickendorf. At present the area controlled by this society is about 80 acres, harboring 900 to 1,000 families.

The renters often build their own huts, which are usually about 3 by 6 yards and of very crude construction. They are intended merely to serve as a protection from the sun and rain. The gardens are fenced off and often special playgrounds are provided for the children. There are also booths where milk and other beverages are to be had. In the lauben kolonien of the Red Cross the sale of alcoholic beverages is forbidden.

Recreation and Industry Combined.

It is customary in Germany for everyone to take a vacation in the summer, usually at the seashore or in the mountains. The lauben kolonien are meant chiefly for people who have not the means to take such a trip. By renting one of these small bits of land they have the opportunity of spending their Sundays and summer evenings in the open. While the German's natural love of flowers is apparent everywhere, a good deal of attention is paid to the growing of vegetables, of which good crops are realized, not only for the owner's use, but even for sale in a small way.

Recently the Red Cross Society has extended the functions of its colonies. Classes are held to teach the girls sewing and cooking, the boys carpentering and other useful employments. A circulating library of good and instructive books is another recent addition.

Periodicals dealing with this subject are the "Freund der Schrebervereine" and "Der Arbeiter und Schreber Garten," both of which are published in Leipzig, and the following books can be obtained from Schneider & Amelang Buchhandlung, Königin Augusta-Strasse 33, Berlin: Kupfer, "Das Arbeiterwohnhaus auf der Ausstellung für Arbeit und Volksernährung, nebst eines Nachtrages über die Laubengarten von Kufalt," 2.20 marks; Jurass, "Laubengarten bei der Grossstadt, oder der Laubenpächter von Berlin, Anleitung über zwecksmässige Einrichtung und Bepflanzung von Laubengarten," 1.50 marks.

VEGETABLE FIBER IN WOOL.

[From Consul Augustus E. Ingram, Bradford, England.]

The serious evils arising from the careless packing of wool have recently been strikingly illustrated by the International Committee on Vegetable Fiber in Wool. This committee has prepared a large show card, to be issued broadcast among woolgrowers, on which is shown a sample of navy blue serge spoiled by the appearance on the surface of numerous fibers of jute which have not taken the dye. Beneath the sample is a warning printed in English, French, German, and Spanish that the greatest care should be taken in keeping jute fiber out of the wool in packing. On the card are also shown samples of string that should not be used and of the kind that is least harmful. The small pieces of jute string that get into the wool can not be picked out in the sorting process, nor is their presence in the woven fabric perceptible until after dyeing, when the only remedy is to have them removed by hand in the burling and mending process.

The vegetable-fiber committee has decided to hold an exhibition of wool packs in London during the early days of the next wool sales in July. Makers are invited to send specimen packs, showing the latest improvements and the lowest prices at which the packs can be sold. Following the exhibition there will be an international conference on the subject. [An article relative to previous action of the International Vegetable Fiber Committee regarding wool packs was published in Daily Consular and Trade Reports on Sept. 28, 1910.]

PLOWS IN SOUTHERN ENGLAND.

[From Deputy Consul John J. Stephens, Plymouth.]

The two plow factories of this district turn out about 1,500 plows annually, which are sold all over England. One of the concerns makes large sales of plows and other agricultural machinery to Argentina.

The only foreign country selling plows in this district is the United States. A large number of American plows are shipped into Devon and Cornwall. The American firms send representatives to call on the local buyers and establish agencies. No business of any importance can be secured by correspondence alone.

The plow most in demand in this district is the reversible or one-way plow, turning a furrow to either right or left by reversing. The plow, including handles, is all iron and retails for £9 (\$43.80). Manufacturers allow wholesale dealers a profit of 25 to 30 per cent.

LEONIC-WARE INDUSTRY IN BAVARIA.

[From Consul George Nicolas Ifft, Nuremberg.]

The manufacture of gold and silver trimmings, tinsel ornaments, braids, tassels, etc., known in the trade as "leonic ware," including manufacture of silvered and gilt copper wire or thread from which the same are made, is one of the many industries of Nuremberg and vicinity. There are in Nuremberg and the neighboring cities of Schwabach, Roth, Treuchtlingen, Weissenburg, Allersberg, and Ansbach about 20 factories engaged in this industry. Three-fourths of these manufacture only the finished product, while the other fourth manufactures the silver and gilt thread, the raw material, as well as the finished articles. The largest of these factories is at Roth, near Nuremberg, and employs, including some home workers, about 700 workpeople. This plant manufactures both the metal thread and the finished product. The second factory in size is in Nuremberg, and employs about 400 workpeople, but makes only the metal thread.

In all, about 2,500 workmen are employed in this industry. Of these, 60 per cent are females. Only a few children, from 13 to 16 years of age, are employed, as the law in regard to child labor is quite strict; such as are employed may work only 6 hours per day, and earn 75 cents to \$1 per week. Female employees over 16 years of age earn \$3 to \$4 per week, and male employees \$5 to \$6 per week.

The value of the annual output in this industry from the factories in this vicinity is about \$2,500,000, and while much of the product is used at home, the near Orient—Turkey, the Balkan States, Egypt, and Asia Minor—is the best customer. India, China, and Japan also buy freely. The United States was formerly a fairly good customer, but in recent years has been buying practically only the silvered and gilt thread and has manufactured the finished product at home. This thread the American manufacturer, it seems, is not able to make successfully. In 1911 leonic ware, mostly the metal thread, to the value of \$197,797 was sent from this district to the United States. This was a decrease of \$18,150 as compared with 1910.

A Prosperous Year Followed by Dull Trade.

The year 1911 opened with a promise of good business in this industry. Tinsel trimmings were still in fashion for women's clothes. The home demand was good and India and the Orient had ordered liberally. With the opening of summer, however, tinsel went out of fashion. The political disturbances in Persia and China, famine and plague in India, and the Italian-Turkish War all combined to lessen the demand of the best customers of this product, and the year closed with a rather dreary outlook, some of the factories having been compelled to reduce both the number of workmen and the hours of labor. This condition has continued during the year, with no present promise of improvement.

This industry is also strongly represented in Saxony—at Freiberg, Annaberg, and Buchholz. Germany's keenest competitors in the world's markets are France and Russia and the product of the latter country, where the lowest wages are paid, is beginning to make its presence felt in the markets of the Near East.

IMPROVED SEWER-GAS BURNER.

[From Consul J. N. McCunn, Glasgow, Scotland.]

An improved burner apparatus for the extraction and destruction of sewer gas has been invented by William Rodger, C. E., burgh engineer of Dunoon, in the Glasgow consular district. It appears that in the apparatus at present employed for this purpose, where the gas is used for illuminating purposes, complete destruction is not effected when the illumination is interrupted or otherwise gas is burned uselessly when illumination is not required. Mr. Rodger's invention obviates these drawbacks and provides advantages not heretofore obtainable.

A combustion chamber for sewer gas is fitted into the interior of the lamp head. This chamber is in the form of a two-part cone, the lower portion of the cone being carried through the base of the lamp head and suitably connected to the upper part of the lamp standard, the upper portion of the cone being made to fit the lower portion and suitably tapered and also fitting lightly the upper portion of the lamp head. In the interior of the upper portion of the cone is fitted a baffle plate and below this is located a Bunsen or other suitable burner, fed from the main gas supply through a by-pass, so that the Bunsen will be kept lit even when the supply to the illuminating burners is cut off. The sewer gas is led from the sewer to the lamp standard and passes upwardly through the cone, being partly burned below the baffle plate and any escaping gas being burned above the baffle plate.

In one of the lamps in Dunoon a burner apparatus is now in use and giving entire satisfaction. The inventor has made application for a patent in the United States.

USE OF ALBUMEN IN GERMANY.

[From Consul George Nicolas Ifft, Nuremberg.]

German "lebkuchen" (ginger bread and spice cakes) manufacturers tell me that they use considerable so-called Chinese albumen, and I am also told that small quantities thereof are used by large restaurants and hotels, by manufacturers of goldbeaters' molds, and by tanners. This product, so far as the users here know, actually comes from China or Asiatic Russia and is the dried whites of hen or duck eggs. Local users do not, however, import directly. German statistics do not separate the imports of albumen, the article being classed with "dried egg products" which were imported in 1910 from China to the extent of 7,586,155 pounds, valued at \$797,062. "Liquid whites of eggs" were also imported from China during the same year to the amount of 412,484 pounds, valued at \$31,178.

Bound Volumes of Daily Consular and Trade Reports.

The Government Printing Office will supply regularly in quarterly volumes, with complete 32-page indexes, bound sets of Daily Consular and Trade Reports from January 1, 1912. The price is \$1.50 per volume or \$6 per year, in order to cover the cost of the index and binding. Those desiring the bound volumes should write to the Superintendent of Documents, Government Printing Office, Washington, D. C.

FOREIGN TARIFFS.**UNITED KINGDOM.**

(From Mittheilungen des Handelsvertragsvereins, May 20, 1912)

Amendment of Merchandise Marks Act.

On December 16, 1911, was published an amendment to the merchandise marks act of the United Kingdom, intended to increase the protection to trade-marks and firm names of British manufacturers and dealers. The law now is that goods bearing falsely and without authority the trade-mark or firm name of British manufacturers shall not be sold or exposed for sale, and the importation of such goods into the United Kingdom is forbidden. The customs authorities are empowered to deal with cases of infringement of this law; they may investigate those cases which come to their attention and notify those British manufacturers and dealers whose trade-marks and trade names are falsely used.

AUSTRALIA.**Dutiable Value of Automobiles.**

The following customs order of May 9, 1912, contains new provisions for determining the dutiable value of imported automobiles in Australia, and supersedes the customs order of September 3, 1910 (published in Foreign Traffic Notes No. 1, p. 21, and in Tariff Series No. 17D, p. 13).

In connection with the importation of motor cars, duty is payable on the home consumption value in the country of export on each part when sold separately, notwithstanding that such parts are imported into Australia in their assembled condition, i. e., as complete motor cars.

Each invoice for motor cars must set forth the following particulars:

- | | |
|---|-------|
| | £ |
| (a) The price paid, or to be paid, by the Australian purchaser for the complete car..... | _____ |
| (b) The gross selling price of the complete car for home consumption in the country of export..... | _____ |
| Amount of discount allowed to home-consumption purchasers at _____ per cent..... | _____ |
| Net selling price for home consumption..... | _____ |
| (c) The net prices ordinarily charged for the separate parts when sold separately for home consumption in the country of export, such separate parts and values to be enumerated as follows: | |
| Chassis (including painting) and wheels, but not tires, dash, spare parts, or accessories..... | _____ |
| Body, including any extra charge for fore doors or high doors, or scuttle dash (when supplied) and including the following parts, viz, mud guards and footboards, including splashboards; brackets and well for spare wheel; dashboard, lamp brackets; hood irons; luggage grids or rails; foot or arm rests; and tool box..... | _____ |
| Tires (if any) showing size, brand and weight..... | _____ |
| Lamps..... | _____ |
| Generator (gas)..... | _____ |
| Tank (gas)..... | _____ |
| Horn..... | _____ |
| Wind screen (wind shield)..... | _____ |
| Top (canopy or hood)..... | _____ |
| Spare wheel and cover..... | _____ |
| Carpets or mats..... | _____ |
| Tools (specify articles and values)..... | _____ |
| Any other parts or accessories (specify articles and values)..... | _____ |

When a chassis, without body, is shipped to Australia, the invoice must show the following particulars:

- (a) The price paid, or to be paid, by the Australian purchaser of the chassis. £ _____
 (b) The net value as and when sold for home consumption in the country of export of: _____
 Chassis (including wheels but not tires)..... _____
 Tires (if any) showing size, brand, and weight..... _____
 Mud guards and footboards (including splash guards and brackets)..... _____
 Dashboard..... _____
 Lamps..... _____
 Lamp brackets..... _____
 Any extra parts and articles comprising tool outfit to be specified separately, with values..... _____

A declaration in the following terms must be made (in a personal capacity) by the manufacturer (or supplier) or by some person duly authorized on his behalf:

I, _____, am the manufacturer (or supplier) (or am duly authorized to make this declaration on behalf of the manufacturer or supplier) of the goods described in this invoice, and I do hereby declare that the net price charged to the Australian purchaser for the complete car is not less (except where otherwise specially indicated hereon) than the net price charged to cash purchasers of similar complete cars for home use in this country; and I further declare that the net prices shown hereon for the separate parts and accessories are not less than the net prices which are or which would be charged for such parts and accessories if sold separately for home consumption in this country.

Signed, _____
 Date, _____

Witness, _____
 Date, _____

For parts and accessories which are of British origin and entitled to entry under the preferential tariff, declaration as to the country of origin (in the terms approved by the Department of Trade and Customs) should appear on the back of the invoice, and should show the total value of those items only which are entitled to preference. For the parts and accessories which are not entitled to preferential tariff rates the word "Foreign" should be inserted against each item on the face of the invoice.

The import duty on automobiles and parts in Australia is as follows: Automobiles and parts not elsewhere included in the tariff, including undergear (inclusive of axles, springs, and arms), axles not elsewhere included in the tariff, springs and hoods not elsewhere included, when imported from any country except the United Kingdom, 40 per cent ad valorem; when imported from the United Kingdom, 35 per cent ad valorem; bodies of motor cars, lorries, and wagons, including dashboards, footboards, and mud guards, (1) single-seated bodies, each—general rate ¹ £17, British preferential rate £15; (2) double-seated bodies, each—general rate £24, British preferential rate £21; (3) bodies with fixed or movable canopy tops, such as landaulet, limousine, taxicab, and similar types, each—general rate £42, British preferential rate £36; chassis of motor cars, lorries, and wagons (but not including rubber tires)—general rate 5 per cent ad valorem; British preferential rate, free. The following articles suitable only for use as parts of chassis are to be dutiable as the chassis: Springs, axles (other than roller or ball-bearing), wheels imported in separate parts, and engines and parts thereof, under security that the articles

¹ The general rate applies to imports from the United States; the British preferential rate is for imports from the United Kingdom. £ = \$4.8665.

in question will be used only in the manufacture of chassis. Roller-bearing and ball-bearing axles are dutiable at 5 per cent ad valorem under the general tariff, and are free when imported from the United Kingdom.

CANADA.

[From Memorandum No. 1684B of the Canadian Department of Customs.]

Tariff Changes in Effect June 14, 1912.

The following changes in the Canadian customs tariff, admitting free or at reduced rates of duty a number of articles used as materials in Canadian manufactures, went into effect June 14, 1912. On the articles specified the rates of the general tariff are applicable when importation is from the United States.

Tariff items.	Articles.	British preferential tariff.	Intermediate tariff. ¹	General tariff.
752	Cane, reed, or rattan, not further manufactured than split, when for use in Canadian manufactures.	Free.	Free.	Free.
753	Flat braids or plaits, of glazed cotton thread, not over one-quarter inch wide, when imported by manufacturers of hats for use only in the manufacture of hat bodies.	Free.	Free.	Free.
754	Celluloid, xylonite or xylolite, in sheets, lumps, blocks, cylinders, rods, or bars, not further manufactured than molded or pressed, when for use in Canadian manufactures.	Free.	Free.	Free.
755	Hard rubber in strips or rods, but not further manufactured, when for use in Canadian manufactures.	Free.	Free.	Free.
756	Artificial abrasives, in bulk, crushed or ground, when imported for use in the manufacture of abrasive wheels and polishing composition.	Free.	Free.	Free.
757	Peroxide of barium, nonalcoholic, for use in the manufacture of peroxide of hydrogen, when imported by manufacturers of peroxide of hydrogen.	Free.	Free.	Free.
758	Binitrotoluol, trinitrotoluol, and perchlorate of ammonia, when imported by manufacturers of explosives for use exclusively in the manufacture of such articles in their own factories.	Free.	Free.	Free.
759	Glass plates or disks, rough cut or unwrought, for use in the manufacture of optical instruments, when imported by manufacturers of such optical instruments.	Free.	Free.	Free.
760	Yarns, threads, and filaments of artificial or imitation silk, produced from a form of cellulose obtained by chemical processes from cotton or wood, when imported by manufacturers of knitted, woven, or braided fabrics, for use only in their own factories in the manufacture of such knitted, woven, or braided fabrics.	Free.	Free.	Free.
761	Collodion for use in films for photo-engraving and for engraving copper rollers, when imported by photo-engravers and manufacturers of copper rollers.	Per cent. 15	Per cent. 17½	Per cent. 17½
762	Special parts of metals, in the rough, when imported by manufacturers of cameras or kodaks, for use only in the manufacture of cameras or kodaks.	5	7½	7½
763	Peppermint oil when for use in Canadian manufactures, ad valorem.	5	7½	15
764	Undyed ribbon, when imported by manufacturers of typewriter ribbon for use only in the manufacture of such ribbon in their own factories.	10	12½	15
765	Fabrics of which silk is the component material of chief value, when imported by manufacturers of neckties for use only in the manufacture of such articles in their own factories, ad valorem.	17½	20	20
766	Paper matting, when for use in Canadian manufactures, ad valorem.	17½	22½	25
767	Drawn iron or steel hoop, band, scroll, or strip No. 14 gauge and thinner, galvanized or coated with other metal or not, when imported by manufacturers of mats for use only in the manufacture of such mats in their own factories.	Free.	5	5

¹ Not in force.

SALVADOR.

[From Diario Oficial, Salvador, May 28, 1912.]

Tariff Changes in New Tariff.

Following the recommendations of the Minister of the Treasury and of Public Credit [see Daily Consular and Trade Reports for May 8, 1912], the legislature of Salvador voted for the publication of a new

edition of the customs tariff, and provided for a number of changes in the rates of duty. Notice of the decree providing for the publication of the new edition of the tariff, containing the changes in the rates of duty referred to, was published May 28, 1912, with the provision that the changes therein contained should take effect 30 days from that time.

It is the intention of the Government to do away with ambiguities and obscurities in the customs tariff through this forthcoming new edition, and considerable attention has been given to the classifications. A number of the changes in the tariff which are made in this decree are little more than changes in form and phraseology, made to improve the classifications in the schedules. Other changes in the tariff are actually increases or reductions in the rates hitherto in force. It is stated that reductions are made on certain articles of general use among the common people and that increases are made in the rates on a number of articles of luxury. The principal articles affected by these changes are as follows:

Articles subject to increased rates of duty: Silk trimmings of all kinds; ready-made clothing of silk; portemonnaies; colored cotton cordage; table linen; imitation gold or silver tissue; Epsom salts, sodium sulphate, and potassium sulphate; iron rivets or clasps for clothing; hinges and similar hardware for doors, windows, and furniture; woolen blankets and quilts; fans with ivory, mother-of-pearl, tortoise shell, or precious metal frame; tiles; manikins or lay figures; underwear; quilts containing feathers.

Articles subject to reduced rates of duty: Cotton shirts with bosoms of pure or mixed silk; cotton blankets with floss silk; pectoral medicines without alcohol, as preparations of cod-liver oil and of tar; sago, tapioca, and lactated flour; borax, hyposulphate of soda, boric acid; naphthalene, incense, gum arabic, benzoin, and similar gums; refined sugar; absorbent and medicated cotton; tinned iron nails and tacks; lead rivet plates for galvanized iron sheets; iron fence wire; pens; shirts of wool slightly mixed with linen or hemp; cement, exempted from the tax of \$0.25 gold [see p. 111, Foreign Tariff Notes, No. 6]; sheet glass of all kinds; glue; scholars' slates.

Articles not specified formerly or given new classifications: Artificial silk in thread, yarn, and fabrics; machinery for making medicines; railway material; woolen quilts and blankets with floss silk; ice; glass bottles with metal and celluloid tops; belts of all kinds for men and women.

[A copy (in Spanish) of the decree, containing the new "aforos," or rates on which the duty is calculated, is on file in the Bureau of Manufactures.]

ENGLISH ENGINEERING SCHOOL ENLARGEMENT.

[From the London Times.]

The new Harrison-Hughes engineering laboratories which form the latest addition to the facilities for instruction in engineering at the University of Liverpool were formally opened on May 18. They have been erected at a cost, including equipment, of about \$200,000. Special attention has been given to the problems of the utilization of fuel for power purposes, and especially to work relating to internal combustion engines and gas producers. The new building also provides an extensive plant for experiments in hydraulics; a laboratory for the study of the dynamics and kinematics of machines; a design and drawing department; a large metal workshop equipped with machine tools of the latest type by English and American makers; and an engineering library.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9085. Wheat and bran.**—An American consul reports that a commission merchant in a European city of 65,000 inhabitants wishes to hear from American exporters of wheat and bran. He also desires connections in other lines similar to these.
- No. 9086. Food products and groceries.**—Several commission merchants in various cities of a German province desire to represent American exporters. They have informed an American consulate that they are particularly interested in food products and groceries. Correspondence is preferred in German.
- No. 9087. Acetylene lighting apparatus.**—American firms interested in the sale of acetylene generators or a system of lighting for household purposes, by means of acetylene, might do well to interest themselves in the trade which is now being developed in this line in a city of the West Indies. An American consul reports that several plants have recently been installed in his district to light private residences, but all the apparatus and material came from a European country. The consul adds that all information to be obtained concerning the introduction of American systems of acetylene lighting to the trade in his district will be furnished upon request for the same.
- No. 9088. Lime.**—A report from an American consul in Canada states that a cement company in his district desires prices and other particulars regarding lime. Quotations should be given both f. o. b. and delivered.
- No. 9089. Motor trucks.**—A business man in a Latin-American country has expressed to an American consul his intention to establish a dray line of motor trucks in the city in which he is located, as soon as the streets are rebuilt, which will take place in the near future. He would like to hear from American motor-truck manufacturers regarding their products, and would be glad to receive catalogues, in Spanish, and any other particulars that would be of value. The consul requests that a complete set of such catalogues be sent for the files of his office also.
- No. 9090. Furnishing goods and wearing apparel.**—A commercial traveler has informed an American consular officer in Canada that he would like to obtain the sales agency for the maritime Provinces for the following lines of goods: Neckwear, collars, shirts, ties, and all other lines pertaining to men's wearing apparel, as well as lines of novelties. He is anxious to hear from American firms handling these lines.
- No. 9091. Dredging and wharf construction.**—The American consulate general at Ottawa, Canada, reports that the Department of Public Works, Ottawa, has advertised for tenders, to be received until July 2, 1912, for dredging required at St. George, New Brunswick, and at Port Arthur, in the Province of Ontario. Tenders will also be received until July 10 for constructing a wharf at Cache Bay, district of Nipissing, Ontario. Specifications and form of tender can be obtained upon application to the department at Ottawa.
- No. 9092. Building materials of various kinds.**—An American consul in an Asiatic country writes that increased building operations in his district suggest a possible market for American building materials, including cement, window and door frames, and woodwork generally. It is urgent that American firms interested in this opening send their catalogues and price lists in quadruplicate to the consulate immediately. The consul further reports that more complete information as to local wants in the way of building materials will be furnished shortly. This information will be furnished to American firms as soon as received by the Bureau of Manufactures.
- No. 9093. Bedsteads, mattresses, furniture, and other hotel furnishings.**—The proprietor of a hotel in the Levant has requested an American consular officer to secure catalogues and price lists of black enameled and brass lacquered bedsteads (single and double), wire mattresses, and other bedroom furniture. About 30 additional rooms are being added to the hotel and they will be furnished in first-class style. Quotations should be given c. i. f. city of destination, and all detailed information regarding articles offered should be given at once.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

Washington, Friday, June 28, 1912

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COMMERCIAL REVIEW OF AUSTRIA-HUNGARY.

AUSTRIA.

[By Consul General Charles Denby, Vienna.]

The domestic condition of Austria during 1911 was characterized by the general normal commercial development that has marked many years. A drought during the latter part of the summer caused a short yield in the later crops and a slackened activity in industries dependent upon the harvests. The insufficient rainfall had a further adverse effect in hindering transportation on the shallow waterways. This made it difficult to bring farm produce to market and increased appreciably the cost of shipping manufactured products, resulting in a general rise in the price of foodstuffs, which, however, did not reach such proportions as to work pronounced hardship. The drought, in fact, was so late in the year that it did not affect crops universally, several of which had been gathered and marketed under normal conditions.

Public Works.

The project for the construction of a system of canals to connect the Galician with the Austrian waterways continued to attract public attention in 1911. The difficulty of raising funds for this great work and the multiplicity of political considerations which surround its undertaking make uncertain the date when it will be actually begun.

The Austrian Government continued in 1911 the settled policy of taking over control of the railways in its territory. At the end of 1910, 83 per cent of the mileage of the country had come under Government control, as compared with 52 per cent in 1901. Only the lack of funds prevents the acquisition by the State of the remaining mileage at an early date.

Foreign Commercial Relations.

Foreign political developments did not directly influence Austria's trade during 1911. The war between Italy and Turkey has as yet been without much effect upon commerce. The portions of the Turkish Empire in which Austrian commerce flourishes most have not so far been seriously affected by the war, though the Bohemian manufacturers find the demand for some lines of their exports temporarily lessened.

The foreign-trade statistics for Austria-Hungary, those for Austria alone not being compiled separately, show exports of \$483,772,800 and imports of \$641,576,200 in 1911, against \$490,977,000 and \$579,129,000, respectively, in 1910. The excess of imports over exports amounted to \$88,152,000 in 1910 and \$157,803,400 in 1911. The values of the principal items of imports and exports during the past two years are shown in the following table:

Articles.	1910	1911	Articles.	1910	1911
IMPORTS.			EXPORTS.		
Animals, live.....	\$2,139,400	\$6,224,800	Animals, live.....	\$19,801,600	\$10,131,500
Chemicals.....	10,094,200	10,925,900	Beverages, except mineral water.....	5,338,500	5,690,300
Coal, coke, and peat.....	35,222,300	38,360,700	Chemicals.....	9,416,561	9,342,060
Coffee, tea, spices, etc.....	17,373,300	22,416,500	Coal, coke, and peat.....	20,703,200	20,225,100
Copper.....	9,483,100	10,586,700	Cotton goods.....	12,202,700	14,367,500
Cotton, and manufactures of:			Eggs.....	21,455,500	22,843,600
Raw.....	60,065,900	63,428,000	Grain.....	8,094,000	4,496,200
Manufactures.....	7,765,800	7,958,400	Hemp, flax, and jute goods.....	5,407,700	5,491,400
Eggs.....	9,503,900	11,621,100	Hides and skins.....	15,084,300	14,449,900
Fruit, tropical.....	9,642,100	10,144,100	Glassware.....	14,948,920	14,354,130
Grain.....	15,289,600	17,737,700	Iron, and manufactures of.	9,718,828	11,790,849
Instruments, clocks.....	11,634,100	12,380,400	Leather, and manufactures of:		
Iron, and manufactures of.	11,772,400	12,844,000	Leather.....	3,903,100	4,064,300
Jute.....	3,996,500	5,893,300	Manufactures.....	10,065,600	9,362,000
Leather and manufactures of:			Malt.....	9,935,000	11,680,200
Leather.....	13,394,500	14,719,300	Metal wares.....	12,418,500	11,580,100
Manufactures.....	2,731,200	3,751,200	Paper, and manufactures of:		
Machines, apparatus, electro-technical goods.....	20,795,400	30,214,300	Paper.....	5,172,400	4,788,000
Paper, and manufactures of.....	6,535,800	6,907,100	Paper goods.....	2,363,100	2,529,060
Rice.....	5,507,000	6,362,200	Paper stock.....	3,538,700	3,857,300
Seeds.....	20,979,000	30,040,500	Silk, manufactures of.....	3,336,800	4,398,000
Silk, manufactures of.....	12,170,500	12,291,400	Sugar.....	48,926,900	42,283,200
Skins and hides.....	16,537,600	21,586,400	Wadding and yarns:		
Tobacco.....	10,380,000	8,492,900	Cotton.....	2,915,700	3,785,708
Wadding and yarns:			Flax, hemp, and jute.....	4,000,300	3,524,900
Cotton.....	5,981,400	6,037,000	Silk.....	3,616,900	3,624,800
Silk.....	11,954,900	12,332,700	Wool.....	2,555,800	2,736,800
Wool.....	13,535,800	11,663,200	Wearing apparel.....	18,717,600	20,170,900
Wool, and manufactures of:			Wood, and manufactures of:		
Raw.....	32,455,600	29,857,600	Lumber.....	15,074,600	16,780,800
Manufactures.....	9,687,400	10,077,500	Manufactures.....	15,412,400	15,553,200
			Other.....	34,307,800	36,208,600
			Wool, and manufactures of:		
			Raw.....	4,490,000	5,134,300
			Manufactures.....	13,780,700	14,550,400

Austria's Adverse Trade Balance.

Much alarm was expressed when the excess of imports over exports in Austria began to assume large proportions several years ago, but no evil effects have resulted, and there is a disposition at present to regard this adverse balance, in spite of its increase, as a normal feature of this stage of Austria's commercial development. This adverse balance is due more to increasing imports than to decreasing exports. The exports in 1911 were only about \$7,000,000 less than

in 1910, while the excess of imports over exports was nearly \$70,000,000 greater than in 1910. The decrease in exports is found chiefly in the items of sugar, grain, cattle, and raw materials for manufacture. As 1910 was almost a record year for sugar exports, the decrease in that item loses much of its significance. The diminished grain exports were due to the continued effects of the poor harvests of 1909; the scarcity of cattle for export indicates an increased home consumption of meat; and the increased use of raw materials by Austrian factories explains the shortage in that item. The increased imports of tea, coffee, spices, tropical fruits, etc., evidence a favorable condition of the consumers, and the increased imports of raw material seem to indicate increased industrial activity. The protective policies of Austria and the countries with which it deals influence the interchange of manufactured goods, while the exports of raw materials and foodstuffs are checked by the home consumption.

If the annual receipts of the hotels, resorts, railroads, and retail merchants from the hundreds of thousands of tourists and students in this country could be estimated in these trade tables, the adverse trade balance would be more than met. Austria receives great numbers of students and tourists for every one it sends abroad. Consul Lowrie, at Carlsbad, reports that the spas of Bohemia were visited by 350,000 tourists and patients during 1911, and similar conditions are found on the Tyrol, the health resorts of Hungary, and the coasts of the Austrian Adriatic. The Austrian emigrants to the United States and other countries, and the agricultural laborers who annually cross the borders of Galicia to help in the harvests of adjoining countries are enormous sources of cash revenue.

Imports from the United States.

The imports into Austria from the United States consist of a great variety of articles. The main items in 1911 were raw cotton, \$37,250,000; unmanufactured tobacco, \$1,358,000; copper, \$7,000,000; pork products, \$2,570,000; resin, \$1,000,000; harvesting machinery, \$800,000; typewriters, \$750,000; mother-of-pearl and mussel shells, \$413,000; machine tools and machinery; dried, canned, and fresh fruit; animal and vegetable fats; boots and shoes; adding machines; cash registers; and a great variety of peculiarly American devices and inventions largely swell the total. Accurate statistics of the imports from America are not available, as an appreciable quantity comes through adjacent countries, particularly Germany, and thus loses its character as American goods, but the value thereof is estimated at something over \$50,000,000.

In general throughout Austria the excellence of the market for American machinery is commented on by all the American consuls in Austria, but in many cases with the added reflection that the market is more carefully watched by competitors than by Americans themselves. American representation for American lines is much to be advised. There is a belief that seems well grounded that firms selling both American goods and goods of competing countries purposely favor competing articles by adding to their American quotations large commissions and middlemen's charges. The advice to American manufacturers must be renewed that personal representation, Ameri-

can, if possible, is highly desirable, and printed matter in the language of the market is essential.

Exports to the United States.

The declared exports to the United States and its insular possessions in 1911, from the five consular districts of Austria proper show a decrease of \$625,304 as compared with 1910. The figures for the past two years are as follows:

Districts.	1910	1911
Carlsbad.....	\$1,704,138	\$1,610,193
Prague.....	3,147,517	3,001,125
Reichenberg.....	3,201,020	2,638,083
Trieste.....	1,362,484	1,381,570
Vienna.....	7,806,727	7,964,571
Total.....	17,220,886	16,585,362

The chief items of this export trade during the past two years are shown in the following table:

Articles.	1910	1911	Articles.	1910	1911
Baskets.....	\$109,438	\$122,288	Lamps and lamp ware...	\$238,909	\$173,933
Beads.....	127,295	256,809	Leather, manufactures of...	124,062	132,285
Beans.....	267,179	100,045	Linen, manufactures of...	728,480	777,266
Beer.....	871,042	888,348	Magnesite.....	1,234,522	663,822
Books, etc.....	150,328	181,256	Meerschaum and ambroid...	391,675	356,575
Buttons.....	159,845	168,067	Metal, manufactures of...	414,714	199,080
Carpets and rugs.....	123,421	108,704	Musical instruments.....	151,467	159,345
Chemicals.....	175,164	107,984	Oils.....	130,032	42,725
Cigarette paper.....	166,771	138,283	Ozocerite and ceresin.....	312,309	170,023
Cotton, manufactures of...	465,661	255,355	Paintings, etc.....	181,922	188,151
Drugs.....	100,000	95,946	Porcelain and pottery.....	965,305	807,585
Fans.....	100,000	120,011	Pulp and pulp wood.....	244,744	200,085
Flowers, artificial.....	199,224	148,497	Seeds and herbs.....	257,883	341,949
Furniture.....	236,637	200,594	Silk, artificial.....	342,003	217,350
Glassware.....	676,939	1,704,624	Siphons.....	104,324	89,515
Gloves.....	311,251	224,780	Smokers' articles.....	248,469	445,761
Hair, human.....	504,432	168,853	Steel.....	276,112	182,418
Hair nets.....	158,510	74,137	Stones:		
Hats and caps.....	133,158	281,669	Glass.....	330,318	422,664
Hides and skins.....	479,206	586,344	Precious and imitation		
Hops.....	926,905	1,051,245	Talc, fats, and glue.....	774,385	562,261
Insect powders.....	100,000	68,514	Toys.....	305,396	192,424
Iron, and manufactures of:			Wearing apparel, ladies'...	218,453	196,087
Enameled ironware.....	181,441	134,206	Woolen goods.....	41,682	57,288
Other.....	236,624	62,609	All other articles.....	377,694	217,174
Jewelry and millinery				1,024,744	1,797,746
goods.....	679,461	421,056			
Laces.....	161,281	308,616	Total.....	17,220,886	16,585,362

While decreases occurred in many items to the United States, the trade has fluctuated in response to a variety of conditions, mostly of a temporary character, having no reference to the essential qualities of the markets. The drought caused a reduction in the bean shipments. The magnesite exports fell off on account of slackness in the steel industry in the United States. Human hair exports show a noticeable decrease, alleged to be due to a change in American styles. The increasing manufacture of the Tungsten electric light globes in the United States cut down the export of these articles in 1911 to \$50,000 as compared with \$117,000 in the preceding year.

Increases were also made in a number of items, including beads, glassware of various kinds, and laces; also hats and caps, owing to the demand in America for the Austrian velours hat. Hops increased in value but not in quantity. Hides and skins show an increase of over \$100,000, due to the decreased American tariff.

HUNGARY.

[By Consul General Paul Nash, Budapest.]

Hungary experienced a year of great prosperity in 1911. The adverse trade balance, far from being an unfavorable sign, indicates Hungary's ability to buy foreign goods. Commercial activity was never greater—the banks report substantial gains in deposits, the railways earned more money and handled more freight and passengers, and the factories, with few exceptions, worked full time throughout the year.

That such conditions exist in spite of Hungary's unfortunate geographical position, and in spite of the keen competition of Austrian industry, is a sign of its inherent strength and a guaranty of its future position among the important industrial nations. Hungary's per capita foreign trade is nearly as great as that of the United States. This is the more striking when it is remembered that Hungary's imports always exceed its exports in value.

Agricultural Review.

The grain crop of 1911 was some 3,000,000 bushels less than in the preceding year, and there were some surprising differences in the yield per acre, as shown by the following table:

Grain.	Yield.		Acreage.		Yield per acre.	
	1910	1911	1910	1911	1910	1911
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Bushels.</i>	<i>Bushels.</i>
Barley.....	55,742,833	75,612,000	2,904,365	2,925,788	19.2	25.8
Corn.....	213,315,714	161,082,000	7,067,818	7,189,219	30.1	22.4
Oats.....	74,660,500	95,532,000	2,911,619	2,930,750	25.6	32.2
Rye.....	54,706,428	54,171,000	3,046,690	2,901,441	17.9	18.2
Wheat.....	181,065,333	190,242,000	9,474,036	9,153,685	19.1	20.7
Total.....	579,520,808	576,639,000	25,404,528	25,100,883	.....	.....

The partial failure of the corn crop, caused by the excessive dryness of July and August, was somewhat compensated for by the increased yield of the other staple cereals, which, being harvested earlier, were not so seriously affected. The quality of both wheat and barley was excellent, being unusually rich in protein, hard, of the finest color, and heavier than for some years past. There has been a steady deterioration in the weight of cereals during the past seven or eight years, brought about, it is said, by the depletion of the soil. Grain prices ruled uniformly higher in 1911 than in the preceding year.

The potato crop also suffered from the lack of rain, and only 183,939,000 bushels were harvested from 1,742,145 acres. This makes an average yield of 105.5 bushels per acre, which is here considered as too small. The yield per acre in 1909, not an exceptionally good potato year, was 118.2 bushels per acre.

The sugar-beet crop was not so bad in Hungary as in the other countries of Europe, and indeed, although the quantity was considerably below the average, the quality was excellent. The average price paid to growers was about 20 cents per 100 pounds. This was about 2 cents less per 100 pounds than in 1910.

Large Production of Wine—Other Crops.

The vintage of 1911 was satisfactory, 105,668,000 gallons of wine being produced from 767,765 acres, as against 60,750,000 gallons in

1910. The quality of the wine was excellent, surpassing that of the preceding year, although it is said not to be up to the highest standard of Hungarian production. The Ministry of Agriculture is building 10 storehouses in the principal wine-growing regions, to enable growers to store their product under the most favorable conditions at a moderate charge. It has often happened in the past that growers, particularly the smaller ones, found themselves, in seasons of exceptionally abundant production, with no cellars to store their wines and were obliged to dispose of part of their supply at a sacrifice. With the new arrangement the small growers will be in a better position to compete with the large proprietors and will also be better able to secure advances on their wines from the banks.

The fruit crop was medium and its quality fair. Prices were to a certain extent kept up by foreign demand. Vegetables of all kinds suffered more or less from the drought. The tobacco crop was not abundant, but as the Government, which buys the whole crop, paid an average of \$4.93 per 100 pounds, 94 cents more than was paid last year, the growers had no cause to complain.

Conditions in the Live-Stock Industry.

There were 6,183,424 head of cattle, 2,000,611 horses, 6,415,197 swine, 7,526,783 sheep, and 331,383 goats in Hungary in 1911, an increase of 6.07 per cent in cattle, 1.4 per cent in horses, 2.2 per cent in sheep, 13.6 per cent in goats, and a small decrease in the number of swine as compared with 1895. The increase in the number of cattle is not sufficient to keep pace with the growing ability to pay for meat and the consequently greater demand, and Hungary has to import somewhat inferior cattle and butchers' meat from Roumania and Servia to make up, in part, for the prime Hungarian beef exported, principally to Austria. The same situation exists, it is said, in the butter industry. Hungary exports large quantities of its best butter and imports inferior Scandinavian butter to meet the home demand.

The small increase in the number of horses is accounted for by the heavy export of these animals, amounting to over \$6,000,000 annually. The value of horses has increased, like everything else, in Hungary during the past few years, and a fine saddle or carriage horse costs more here than in France or England. It might even be possible for American breeders of blooded horses to sell some animals to advantage here. The decrease in the number of swine, amounting to some 30,000 in 16 years, is attributed to hog cholera. Ten years ago pork was 30 per cent cheaper than beef; now it costs as much as veal, which is the highest-priced staple meat on sale. In order to combat as far as possible the decreasing herds, the Ministry of Agriculture for several years past has imported English boars for crossing with the native breed, with satisfactory results. The crossbred sow produces litters of 10 to 12, while the pure Hungarian breed has only 6 to 8 young.

Increased Use of Sheep and Goat Products—General Farming.

The increase in the number of sheep is due to the better demand caused by the ever-increasing price of wool and the gradual awakening of the Hungarian public to the fact that mutton and lamb are desirable as food. Ewe's milk is also coming more and more into use for cheese making, and some of the Hungarian cheeses, notably that

called Puszta Döry, are quite up to the standard of the best Camembert. Goat breeding for milk and cheese production has developed very well. Whether anything is being done with the hair of these animals has been impossible to learn, but the skins are valuable for glove makers and find a ready market.

On the whole, 1911 was a good year for the farmers. The protective tariff on agricultural products, the increasing wealth, and the demand for more and better food, which depends upon the increased ability to buy, have kept prices up to a level never reached before. Hungarian lands are being gradually divided up into small parcels and used for intensive culture instead of for grazing cattle and swine, as formerly. Agricultural education is advancing steadily enough to encourage still further efforts on the part of the Government toward the establishment of schools, the maintenance of traveling lecturers, etc. Dry farming is arousing more and more interest, and it is hoped that an international congress on this subject will be held in Budapest in 1913 or 1914.

Rapid Increase in Number of Banks.

Large increases in bank capitalization and high dividends marked 1911 in financial circles. In Budapest 18 new banks were established, and 185 in the Provinces. Conservative bankers fear that the keen competition likely to result from the rapid increase in the number of banks in Hungary may induce the smaller banks to accept risks that are not now carried by good houses, and thereby weaken the popular faith in the solidity of the smaller banks. Failures are now rare in the Hungarian banking world. The following table shows the increased business of the five leading Hungarian banks during 1911, in millions of dollars:

Banks.	Capital.		Assets.		Liabilities.	
	1910	1911	1910	1911	1910	1911
	<i>Million dollars.</i>	<i>Million dollars.</i>	<i>Million dollars.</i>	<i>Million dollars.</i>	<i>Million dollars.</i>	<i>Million dollars.</i>
Pest Hungarian Commercial Bank.....	10.1	10.1	81.2	93.3	65.7	80.1
Hungarian General Credit Bank.....	12.1	16.2	76.5	90.7	64.5	72.5
Hungarian Bank and Mercantile Co.....	8.1	12.1	29.8	46.2	21.1	29.6
Hungarian Discount and Exchange Bank.	8.1	10.1	39.9	45.0	33.8	30.4
Hazai (Hungarian National) Bank.....	5.0	8.1	20.7	28.8	16.0	20.6

Some 35 other Budapest banks increased their capitals from an aggregate of \$53,186,000 to \$75,892,000, while 355 banks in the Provinces are reported to have increased their capitalization by an aggregate of \$23,548,000.

The five banks named in the table are interested in no less than 386 commercial and industrial companies. Almost all Hungarian industries, and to a certain extent Hungarian commerce, are capitalized by the banks, and the ability of the banks to provide funds for new enterprises is one of the reasons for the progress of Hungarian industries. These five banks paid dividends of 17, 11.5, 10, 7.5, and 8 per cent, respectively, a remarkable showing considering the increased capitalization of four of them.

New Mortgage Bank—Discount Rate—Increased Note Issue.

The National Union of Hungarian Mortgage Banks, one of the newly established banks, is planned to assist small farmers by buying large

estates, dividing them into small parcels, and selling them on extremely easy terms. The bank will also lend money to farmers for investment in their farms, to be repaid in small annual sums during 20 to 40 years. Of the \$3,045,000 capital of this bank, \$1,624,000 was furnished by the Government and the balance by three of the leading mortgage banks. The annual dividend is limited by law to 4 per cent. The president, vice president, and two members of the board of directors are designated by the Minister of Finance and the Minister of Agriculture. This cooperation of the Government with private concerns is one of the striking features of Hungarian commerce and industry and deserves to be more thoroughly studied by foreign students of economics.

The discount rate of the State Bank remained at 5 per cent from the beginning of 1911 until February 3, when it was reduced to 4.5 per cent. Toward the latter part of September, when the Morocco question was causing France to withdraw large sums from the European money market, the rate was again raised to 5 per cent. By the agreement entered into August 16, 1911, by Hungary and Austria the joint State Bank was empowered to increase its note issue exempt from taxation to \$121,800,000, with the privilege to extend until the end of 1917. The gross profits of the bank in 1911 were \$5,988,500, as against \$3,877,300 in 1910. Of this profit Hungary received \$1,583,400 net and Austria a like amount.

Stock Market—Government Expenditures.

The stock market was active throughout the year in spite of the disquieting influence of international affairs. The value of securities dealt in aggregated something over \$325,000,000, as against \$312,000,000 in 1910. Industrial shares were most active, on account of the flourishing conditions which prevailed in most branches of industry, and values had a tendency to increase. Bank shares advanced very little, probably owing to the establishment of so many new banks and to the increased capitalization of a large number of those already in existence. Government securities showed a downward trend. The public does not seem to favor Government rentes, with their small yield, when there are many commercial and industrial companies whose shares yield a higher dividend and which are considered as sufficiently safe. It is stated that the Government is about to require insurance companies and banks to invest a certain part of their capital in Government paper. This would reduce the profits of such companies, but would be an additional safeguard for the public and perhaps a necessary one if the rapidly increasing number of banks brings about a tendency to accept unreasonable risks. It is regretted that so little American capital finds its way to Hungary and that the Budapest Stock Exchange is not yet open to American securities. The mutual interest which would be aroused by a greater financial intercourse would be beneficial to both countries from every point of view.

The estimated ordinary expenditures of the Hungarian Government amounted to \$334,491,460 in 1911, an increase of \$46,491,460 over 1910. It is hoped that the new tax law which is to go into effect on January 1, 1913, will prove effective in meeting the constantly increasing expenses. This law, enacted in April, 1909, was to have gone into effect in 1910, but was postponed in the hope that it would not be necessary. The tobacco monopoly of the Government raised

its prices about 25 per cent, and it is expected that this will increase the revenues by a large amount. The burden of taxation in Hungary is becoming very heavy and is likely to become even heavier. The further contribution which Austria desires Hungary to make toward the maintenance of the common army will entail a great additional annual expenditure, if Hungary consents.

Commerce—Cost of Living.

Both domestic and foreign commerce were more active than in any previous year, and the turnover of Hungarian merchants was relatively large. In spite of the increased number of firms and the ever-growing competition, there were only 510 bankruptcies reported throughout the Kingdom, 68 less than in 1910. The most disquieting feature of the year was the further rise in the cost of living, an average increase in the value of the necessities of life estimated at 18 per cent. This is particularly remarkable when one considers the steady upward trend of prices since 1907, and unless something is done to relieve the situation those people who depend upon fixed incomes for their sustenance will soon be brought to the verge of absolute want. This applies especially to Government employees, of whom there are over 300,000 in Hungary. The prices of the necessities of life are considerably higher here than in the United States. The average price of beef carcasses here in 1911 was \$15.31 per 100 pounds, and of hogs \$14.95 per 100 pounds.

Government Aid to Industry—Iron Mills.

Hungarian industry gave very satisfactory returns during 1911, in spite of Austrian competition, higher wages, higher freight rates, serious railway congestion during the autumn, and compulsory insurance of employees against accident and illness. Hungarian industry is aided by the State, through subsidies, exemption from taxation, etc., but manufacturing is comparatively new in this country and the absence of a customs frontier between Hungary and Austria makes it imperative to assist manufacturers if they are to successfully compete with the well-established industries of the latter country. The value of the export of manufactures from Hungary during 1911 is estimated to be about \$162,000,000, an excellent showing for a country which a generation ago was purely agricultural. When it is remembered that Hungary's purchasing power is relatively very great and that she imported some \$303,000,000 worth of manufactured and partly manufactured goods in that year, a great part of which could be produced successfully here, it is not surprising that the future is considered very bright.

The iron industry was kept busy throughout the year. There was a very great demand for structural steel on account of the activity in the building trade and for armor plates for the navy. Orders for rails and rolling stock were delayed and were not as heavy as had been anticipated, so that some of the plants had to secure orders from abroad in order to keep going at full capacity. Machine manufacturers had a good year and expect still better things in 1912.

Other Manufacturing Activity.

The electrical industry, one of the most advanced in Hungary, was again successful in securing orders from abroad, principally in Austria, Italy, the Levant, and the Far East. The chemical industry

is one that apparently feels the Austrian competition strongly, but in spite of this two new plants were opened in 1910 and the construction of a third was begun.

The textile plants worked at 75 per cent capacity during the first five months of 1911, after which, with the prospects of a good harvest to stimulate the demand, they were kept at full capacity to the end of the year. The total capital invested in the textile industry amounted at the end of 1911 to \$77,000,000, about 60,000 hands were employed, and the value of the output was between \$51,000,000 and \$56,000,000. About half of the plants are engaged in the production of cotton goods and the remainder make woolen, linen, hemp, jute, and silk goods. This industry perhaps more than any other has felt the Austrian competition and under the circumstances it is somewhat surprising to see what progress has been made during the past decade.

The number of new industrial plants established during 1911 was 223, with an aggregate capital amounting to about \$24,000,000. Eighty industrial concerns increased their aggregate capital by \$11,502,910. The State spent \$3,349,500 in the form of subsidies to aid in the construction of 10 new plants and the enlargement of 15 already existing, thereby assuring the employment of an additional 3,700 operatives. Thirty-six smaller plants were assisted in the installation of new machinery, and over 100 factories were exempted from taxation. For the assistance of small plants the Government intends to purchase machinery and turn it over to the manufacturers at cost price, at the same time giving long credit. Industrial legislation was restricted to the passage of a bill limiting the hours of work for women employed in factories. This bill is the result of the international convention concluded in 1906, at Berne, of which Hungary was one of the signatories.

Mining.

There are no official statistics available on the subject of mining during 1911. In 1910, 7,517 pounds avoirdupois of gold, 27,661 pounds of silver, 213 long tons of copper, 2,076 tons of lead, and 502,000 tons of iron were produced and large quantities of ore were exported for reduction abroad. There was also some production of zinc, antimony, aluminite, manganese, and various other minerals. The production of coal amounted to 9,036,000 tons, and it is said that the production of 1911 was greater by about 800,000 tons. There is much room for improvement in the methods employed in most Hungarian mines, and with better methods the production will be greatly increased. There are vast resources in the way of coal and iron which have not as yet been touched and which will prove of inestimable value in the development of Hungarian industry. The coal is not of the first quality, but with modern methods of use there is no reason why Hungary should be obliged to import such enormous quantities of fuel as at present. Transylvania is particularly rich in coal, iron, and other mineral deposits which are awaiting exploitation. Petroleum and natural gas have only just begun to be developed, and indications already observed lead to the belief that both of these products will be found in large quantities.

General Foreign Trade.

Hungary's imports amounted to \$412,762,059 in 1911, against \$365,001,001 in 1910, and its exports to \$359,732,290, against

\$340,877,966 in 1910. The excess of imports over exports, while greater than that of 1910, was therefore due to the increased purchase of foreign goods and not to a decrease in exports. For example, the imports of textiles, wearing apparel, and dry goods showed an increase of over \$6,000,000 in 1911, while the exports of this class showed a slight gain. The increase in exports is more than accounted for by the larger shipments of breadstuffs, amounting to \$125,604,446 in 1911, against \$99,156,667 in 1910. The exports of live animals showed a decrease of about \$15,000,000, owing to smaller shipments of cattle and swine, while the imports showed an increase. Wine exports showed a gain of over \$4,000,000, with a small decrease in the imports. The import of cotton shows an increase of \$2,000,000, which speaks well for the Hungarian textile industry. The imports of fuel, principally Welsh and Prussian coal and briquets, increased about \$3,000,000. The values of the principal items of import and export during 1910 and 1911 are shown in the following table:

Articles.	Imports.		Exports.	
	1910	1911	1910	1911
Animals, live:				
Cattle.....	\$376,181	\$685,826	\$33,412,254	\$26,096,176
Horses.....	236,266	415,734	6,155,841	6,979,718
Poultry and game.....	191,169	750,797	2,382,343	2,208,495
Sheep and goats.....	14,365	17,725	669,470	449,408
Swine.....	11,271	714,147	19,357,940	11,400,973
Other.....	41,796	49,367	72,345	69,934
Barks, dyewoods, etc.....	1,165,247	994,561	1,727,337	1,801,146
Beans, etc.....	440,332	509,766	3,021,644	2,449,131
Beverages:				
Beer.....	1,000,742	1,223,939	244,832	265,247
Brandies and alcohols.....	1,480,211	2,116,793	1,484,082	1,641,340
Mineral waters.....	408,660	447,643	1,040,159	1,047,225
Wines.....	2,415,180	2,178,106	6,575,002	10,228,763
Other.....	22,457	21,044	11,662	18,126
Boats.....	329,469	1,182,158	143,587	258,569
Breadstuffs:				
Barley.....	76,914	355,705	8,795,009	10,309,415
Corn.....	646,194	1,193,159	11,260,329	15,006,300
Flour—				
Rye.....	90,601	98,931	1,542,551	2,659,288
Wheat.....	629,847	544,038	40,404,060	47,470,196
Oats.....	389,561	951,785	5,698,207	7,313,350
Rice.....	5,261,357	5,341,940	2,449,577	3,812,700
Rye.....	16,817	17,493	9,618,768	12,232,219
Wheat.....	6,910,100	2,035,458	16,536,839	23,113,588
Other.....	306,506	410,530	2,550,407	3,687,290
Bricks, tiles, etc.....	3,026,597	3,515,088	424,322	539,539
Brushes, straw goods, etc.....	1,088,781	1,125,500	1,158,573	1,382,647
Candles, soap, etc.....	2,006,928	2,431,649	355,571	340,332
Carriages, bicycles, etc.....	2,206,500	2,707,455	401,947	443,939
Cars, railway and tram.....	12,290	31,113	176,560	425,151
Casings.....	500,198	445,800	633,217	567,228
Chemicals.....	6,307,083	7,022,887	5,229,472	5,260,390
Cocoa and chocolate.....	1,639,802	2,018,033	373,071	361,009
Coffee.....	3,946,314	4,728,773	199,683	234,182
Cotton, raw, waste, etc.....	3,350,063	5,385,191	167,265	190,391
Drugs, perfumes, and paints.....	4,577,036	4,933,338	927,587	1,077,415
Eggs.....	204,959	310,783	7,050,205	7,254,339
Electrical apparatus.....	3,303,788	4,414,937	1,766,098	2,166,423
Feathers.....	206,303	269,674	1,854,342	1,821,693
Fish.....	1,691,809	2,137,221	365,595	555,642
Fruits and nuts.....	3,946,539	4,753,402	2,083,360	4,228,253
Fuels:				
Coal and briquets.....	8,505,892	11,114,643	149,222	144,509
Firewood.....	59,900	33,997	327,086	379,597
Lignite, peat, etc.....	3,050,208	3,310,250	1,768,687	1,714,160
Fur goods.....	1,549,008	1,743,772	202,563	258,355
Glass and glassware.....	4,160,267	3,949,700	528,217	520,246
Greases, fats, etc.....	2,607,531	3,229,603	1,317,994	1,090,180
Gums and resins.....	171,603	165,719	4,166	2,071
Hair and bristles.....	570,690	648,336	218,727	164,940
Hemp, flax, and jute.....	1,938,400	2,613,193	1,725,440	2,010,138
Hides and skins.....	3,675,967	5,170,020	4,655,186	4,326,053

Articles.	Imports.		Exports.	
	1910	1911	1910	1911
Instruments, scientific, musical, typewriters, etc.	\$6,156,541	\$6,916,281	\$856,273	\$574,958
Iron and ironware.	21,219,000	23,666,967	6,765,778	6,447,304
Jewelry and precious metals.	12,329,878	14,528,929	5,858,930	5,965,111
Leather and leather goods.	21,285,968	24,493,548	6,764,685	7,156,588
Lumber, timber, etc.	6,201,145	6,427,309	13,016,990	13,063,133
Machinery, except electrical.	15,922,362	18,633,913	3,291,883	3,270,604
Malt.	42,762	300,034	1,145,185	1,003,823
Matches and explosives.	770,948	922,257	1,581,685	1,832,948
Metals and metal ware.	10,392,546	11,724,978	1,945,571	1,954,766
Milk.	86,740	113,692	1,833,650	2,034,827
Minerals:				
Building stone, etc.	135,103	143,835	38,718	37,915
Ores.	370,129	505,639	2,739,089	2,782,271
Other.	2,130,657	2,570,095	1,031,580	1,054,579
Oils:				
Mineral, coal tar, etc.	2,988,569	4,067,987	1,157,407	1,070,429
Olive.	748,549	635,199	67,600	65,503
Other.	797,505	1,047,671	1,629,898	1,521,699
Oilcloth, etc.	840,301	842,716	907,793	1,045,222
Paintings and statuary.	565,724	740,059	258,575	287,699
Paper and paper goods.	7,510,823	8,366,755	1,298,636	1,536,628
Paper stock and wood pulp.	198,451	226,918	1,452,190	1,535,357
Pitch, tar, and turpentine.	412,889	572,672	17,283	33,076
Printed matter.	1,889,589	2,093,179	314,386	281,373
Provisions:				
Cheese.	770,993	827,027	728,836	697,474
Butter, lard, etc.	1,471,614	2,166,205	7,079,375	5,667,209
Meats, butchers.	397,999	3,676,905	2,973,964	3,511,268
Meats, preserved, etc.	1,145,688	1,653,449	1,300,438	1,636,576
Poultry and game.	50,413	53,688	4,990,583	4,607,855
Other.	2,435,749	2,678,772	1,049,445	1,108,641
Rags.	70,782	147,014	422,896	389,352
Roots and herbs.	244,050	172,673	401,998	451,408
Rubber, and manufactures of.	3,289,423	4,393,798	784,856	806,327
Salt.	65,087	56,717	101,230	104,951
Seeds.	3,538,951	5,355,658	3,673,782	3,395,082
Silk, raw.	3,973	4,049	257,705	193,641
Spices.	737,143	969,347	307,605	258,991
Stone, cement, etc.	1,591,881	2,014,008	597,184	720,695
Sugar.	3,025,857	2,001,951	13,125,315	11,378,255
Tea.	387,694	471,733	4,667	9,015
Textiles:				
Cotton goods and yarns.	52,207,371	56,429,363	7,880,195	8,683,200
Flax, hemp, and jute.	7,940,829	8,347,580	2,380,664	2,255,348
Silk goods and yarns.	11,056,045	11,388,514	2,413,008	2,266,294
Woolen goods and yarns.	33,062,121	33,152,475	3,557,066	4,456,003
Tobacco.	3,436,610	3,503,337	4,352,270	3,809,561
Trees, plants, bulbs, etc.	340,206	655,485	250,356	293,542
Vegetables.	1,043,583	937,114	3,387,232	3,679,229
Wearing apparel and dry goods.	22,104,317	23,566,099	1,792,531	1,967,444
Wood, and manufactures of.	9,561,787	11,374,878	3,630,011	4,143,088
Wool, raw and combed.	2,215,759	2,073,828	3,853,215	3,254,076
All other articles.	3,082,308	4,086,047	6,288,395	7,296,165
Total.	365,001,001	412,762,059	349,877,966	359,732,280

Imports from the United States.

As the greater part of the American goods imported into Hungary comes via Germany or Austria and appears among the imports from those countries, it is impossible to state the value of Hungary's imports from the United States with any degree of exactness. For example, the imports of American typewriters indicated by the official statistics for 1910 indicated approximately 1,800 machines, whereas nearly 4,000 American typewriters were imported in that year. The imports of American shoes in that year amounted to at least 45,000 pairs, although the import statistics indicate only about 24,000 pairs. The great majority of American exporters will not learn to deal direct with this country, and many of those who have agents here insist on shipping via Hamburg. Under these circumstances the following table, giving the direct imports from the

United States during 1910, is interesting only as showing the character of the goods imported. The total value of the American goods which reached this market in that year was between \$14,000,000 and \$16,000,000.

Articles.	Value.	Articles.	Value.
Animal products.....	\$126,985	Metals and metal ware.....	\$1,365,618
Cotton.....	2,110,564	Minerals.....	686,889
Drugs, paints, chemicals, etc.....	34,707	Mineral oil.....	257,221
Fats, greases.....	12,135	Paper, stationery.....	8,317
Fruit, vegetables.....	16,673	Rubber, rubber goods.....	11,939
Fur goods.....	7,912	Tobacco.....	64,522
Gums, resins.....	209,463	Typewriters, watches, instruments.....	69,412
Iron, hardware.....	39,826	Vehicles.....	27,803
Leather, leather goods.....	135,969	Wood manufactures.....	24,007
Linen, flax, lute.....	82,071	All other articles.....	11,543
Lumber, coal.....	127,250		
Machinery, tools.....	694,059	Total.....	6,123,890

Exports to the United States.

The exports to the United States in 1911, as invoiced at the consulates in Hungary, amounted to \$2,293,690, a decrease of \$763,185, which was more than accounted for by the falling off in the exports of beans and broom corn, due to crop conditions in the United States and high prices here. The decrease in broom-corn shipments was also partly due to the damaging of the reputation of Hungarian broom corn on the American market by unscrupulous exporters, who sent shipments inferior to sample. The other decreases were accounted for by higher prices in Hungary, except in the case of mineral water, where overstocking was said to be responsible for the decreased demand. Considerable increases were made in the items of hair and bristles, hides and skins, rice, seeds, sugar, wine, and wood pulp. The following table shows the value of the principal exports to the United States in 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Asbestos.....	\$31,035	\$11,973	Paintings.....	\$17,456	.....
Beans.....	919,978	100,357	Paprika.....	41,654	\$34,606
Books and printed matter.....	35,368	20,962	Roots and herbs.....	43,114	44,538
Brandy and spirituous liquors.....	40,228	36,535	Rubber goods and waste.....	24,904	37,821
Broom corn.....	253,989	79,640	Rice.....	.....	125,198
Cheese.....	24,539	17,254	Seeds.....	37,187	54,385
Feathers.....	10,166	6,062	Sugar.....	30,127	287,096
Furniture.....	8,436	10,944	Textiles, etc.....	19,871	6,979
Glassware.....	37,466	33,026	Toothpicks.....	10,010	17,971
Greases and fats.....	17,663	1,513	Toys and dolls.....	13,012	10,897
Hair and bristles.....	11,964	25,114	Wax.....	14,905	16,282
Hides and skins.....	82,480	134,689	Wine.....	39,243	56,630
Household and personal effects.....	12,322	4,888	Wood pulp.....	70,898	104,453
Hemp.....	6,432	6,023	Wool.....	15,927	.....
Juniper oil.....	.....	5,785	All other articles.....	58,098	80,793
Magnesite.....	808,564	761,306			
Mineral water.....	174,680	120,380	Total.....	3,056,875	2,293,690
Nuts.....	136,150	67,190			

The exports to the Philippine Islands in 1911 consisted of \$6.897 worth of incandescent lamps, against \$116,359 worth of incandescent lamps and \$1,875 worth of wire nails in 1910.

Railway Transportation.

During the first 10 months of 1911, the latest period for which statistics are obtainable, the Hungarian railways transported 127,025,000 passengers and 62,700,000 tons of freight, while the gross income

amounted to \$91,832,000. The total receipts for the 12 months of 1910 amounted to \$96,156,000, and if the last 2 months of 1911 were up to the average of the preceding 10 months the total for that year was over \$110,000,000. The total length of all the railways in Hungary at the end of 1910 was 12,397 miles, and 204 miles were constructed in 1911. At the end of 1910 the capital invested in railways was \$871,634,000. No figures are available of the investment in railways during 1911, except for the State railways, on which over \$17,000,000 was spent, principally for enlarging stations, double tracking, and general improvements.

The bridge over the Danube River at Gombos was completed, shortening the journey from Budapest to Serajevo by 50 miles, and a new coaling station and a warehouse for perishable freight were constructed at Budapest. The rolling stock of the railways was also increased.

Slow-freight rates were advanced 5 per cent and fast-freight rates 7 per cent on the State railways on January 1, 1910, owing to the fact that the net earnings were only about 2.5 per cent. The increase did not give the expected results and caused some dissatisfaction. The returns for the first 10 months of 1911 seem to indicate a substantial improvement of conditions and that the increased rates have not hindered the development of business and have increased the net earnings. A further increase is now under discussion, and will probably become operative on January 1, 1913. The zone system of passenger rates is to be replaced by the mileage system, and a substantial increase in the receipts from passenger traffic is expected. Toward the end of 1911 there was a great congestion of freight on most of the Hungarian lines, partly owing to a shortage of cars and partly to inadequate warehouse facilities at certain important points.

Hungary's Shipping Trade.

Inland river navigation was favored by a long and busy season, although low water during part of the summer impeded traffic to some extent. The Danube and the other important rivers were open for traffic in the early part of March and remained open until well into December. No statistics are yet available to show the aggregate amount of freight and the number of passengers carried by the different river navigation companies, but judging from the returns of one of them, showing an increase over 1910 of 45,000 tons, or a total of 862,500 tons in 1911, the increase was normal. An important event for the companies doing business on the Danube was the opening of navigation from Ratisbon (Regensburg) to Vienna, so that goods can now be shipped by river to Servia, Roumania, and Bulgaria and can be transhipped at Galatz for Black Sea and Mediterranean ports. Hitherto freight traffic on the rivers has been almost entirely limited to heavy or bulky goods, such as grain, building materials, etc., but recently there has been a tendency on the part of shippers to use this mode of transport for smaller packages as well; perhaps on account of the congested condition of railway freight traffic which has made prompt delivery impossible in many cases. Hungary has a well-developed system of waterways, and inland navigation has been a potent factor in her economic evolution.

Hungary is not usually mentioned as a maritime power, but there are 100 steamships with an aggregate tonnage of 199,300 engaged in

foreign trade and flying the Hungarian flag. This is proportionately much greater than the tonnage engaged in foreign trade under the American flag. Three of the four principal lines received subsidies during 1911.

One company received \$231,000 for maintaining regular sailings from Fiume to Spain, Portugal, and South America, and \$177,000 for a regular line to Morocco, calling at Malta, Gibraltar, Tunis, Algiers, Tangier, Casablanca, and Mogador. This company carried 9,997,000 tons of freight during the year. Regular services are also maintained between Fiume and Patras, Fiume and Italian ports, and Galatz and Constantinople. Hungarian shipping suffers somewhat from Austrian and Italian competition.

Government Efforts to Limit Emigration.

The Minister of the Interior places the number of emigrants from Hungary to the United States during 1911 at 70,000, compared with 137,000 in 1910. This decrease is regarded in Hungary with much satisfaction and is attributed in part to the better conditions of life which are beginning to obtain among the emigrant class. It is doubtless true that conditions have improved during the past few years, but there has not been a sufficient improvement in the ratio of wages to the cost of living to account for a 50 per cent decrease in emigration, and the real reason must be sought in the fluctuation of the American labor market. Efforts are being made by the Government to improve the conditions of the workingmen and the Government is assisting those who have already emigrated to the United States to return.

The emigration of several million people in the past 15 years has had a deterrent effect upon the country's progress. The ill effects are somewhat mitigated by the large amounts of money sent back to Hungary every year, but Hungary needs labor more than money.

COST OF LIVING IN SPANISH CAPITAL.

[From Consul Charles L. Hoover, Madrid.]

Only a general idea of the cost of living in Madrid can be given, as practically everything depends upon the standard maintained. Large modern apartments can not be had under \$1,200 per annum, and there are few at that price. Modest apartments may be had as low as \$750, and the most luxurious cost about \$5,000. Excellent ones may be had at \$1,800 to \$2,000.

Salaries of servants vary here according to the class employed. Housemaids command from \$4 per month for untrained peasants to \$10 for the best, cooks get \$10 to \$30, butlers \$16 to \$30, lackeys \$10 to \$20, chauffeurs from \$30 for poorly trained drivers to \$75 for skilled mechanics; but board and lodging are not usually furnished to chauffeurs.

Living is more expensive in Madrid than in any other city in Spain. Rents are about 50 per cent higher and other things about 25 per cent. This is easily accounted for by the fact that nothing is raised in the vicinity of the city and that it is the home of practically all the wealthy people of the Kingdom.

Sanitary conditions in most parts of the city are excellent, and the older portions are rapidly being brought up to date in this respect.

CONSTRUCTION WORK ABROAD.**MEXICO.**

[From Consul T. C. Hamm, Durango.]

The State of Durango has only a little over 400 miles of railroad in operation. When it is considered that the State's area is approximately 43,000 square miles, the inadequate means of communication are apparent. This has helped prevent more rapid development of the rich and varied natural resources. A realization of this need recently resulted in much activity in railroad construction work and in projecting other much needed lines. Two important trunk line railroads now building will open up wonderfully rich sections and promise to give a powerful impetus to the State's material progress.

Durango-Mazatlan Extension.

The Llano Grande branch line, begun about two years ago, is being pushed to completion. Trains are now running to Rio Chico, 35 miles west of the city of Durango. The gorge of the Chico, some 900 feet deep, is being spanned by a 700-foot steel bridge, which will require six months to complete. Grading work west of the Chico has been finished, but track laying can not be undertaken until completion of the bridge, so it will be about a year before trains are running to Llano Grande, the present proposed terminal 65 miles west of this city. The road is standard gauge; a 2 per cent grade is maintained throughout, and 75-pound steel rails are used; the construction work being thorough, as this road is to be the first link in the trunk line connecting Durango with Mazatlan on the Pacific coast.

The chief engineer of the National Lines of Mexico was recently here and caused it to be known that the extension from Llano Grande westward to Mazatlan was assured and that construction would begin in the not distant future. This road will be one of the great engineering feats in modern railroading and will reveal many points of scenic grandeur. From Llano Grande to the crest of the Sierras, which will be negotiated at an altitude of approximately 9,500 feet, the road will have a steady, circuitous climb, but the 2 per cent grade will be maintained throughout. The direct distance from the summit to sea level at Mazatlan is about one-half that required to cover at a 2 per cent grade. The Pacific slope is so precipitous that it was at first thought to be impracticable to construct the road at this grade, but after many surveys it was worked out. About 7 miles of tunnel will be required. At one point the road will follow a hogback only a few feet in width and several hundred yards in length, which has a precipitous drop on either side of more than a thousand feet; at another point the road will wind about for 31 miles and return to within 2½ miles of the starting point. There are several instances in which the road describes complete circles and tunnels underneath the former track. It is estimated that the cost of the completed railroad from Llano Grande to Mazatlan will be \$12,000,000 to \$15,000,000 and that six or seven years will be required in its construction.

Durango's New Lumber Mill.

The Llano Grande branch has been built primarily as a timber road to tap the excellent growth of pine and oak in the hill country west of Durango City, which promises to become quite a lumber and milling center. To utilize the timber thus made available, a large sawmill, a

planing mill, and box factory are nearing completion in this city. The buildings are being substantially constructed of stone and are equipped throughout with American machinery which, when running at full capacity, will have a daily output of 200,000 board feet of lumber. The planing mill and box factory are likewise large modern plants. The latter will utilize the waste lumber. The local demand for boxes is considerable, as much of the commerce, especially with mining camps, must still be transported by mule or burro, and small wooden boxes prove the most convenient form for transporting the necessary supplies.

The cost of this completed plant of the *Compañía de Madera de la Sierra* will be about \$400,000, and, with the exception of the Madera mills in the State of Chihuahua, it will be the best equipped lumber mill in northern Mexico. The company owns much of the valuable timber property along the line of the new Llano Grande Railroad—a tract about 85 miles in length by 15 to 20 miles in width. A branch line has been constructed by the lumber company connecting with the Llano Grande Railroad at Navios, 52 miles west of Durango, and running 18 miles through the company's property. When the timber along this line is exhausted, it is the intention to extend the line farther south and eventually to build an additional spur track to the north. A favorable opportunity offers for the sale of American logging and timber cars and for logging tools and accessories in general.

Canitas Branch.

Another railroad line under construction, which means much for this section of Mexico, is the Canitas cut off from the city of Durango southeasterly about 170 miles to the city of Canitas, in the State of Zacatecas, where it will tap the Mexican Central to Mexico City. Passengers desiring to go to the Federal capital or other southern points from Durango must now go north 158 miles to Torreon before starting south. The new road will effect a saving in time from Durango of about seven hours and 186 miles. The road is completed 50 miles from Durango and is being extended about three-fourths of a mile per day. This new road traverses rich farming land, besides giving access to Sombuerte, Chalchihuites, and other important mining camps in Zacatecas.

Nazas Valley & Pacific Railroad.

This company has been formed to build a railroad from Tepehuanes to Guanecevi, both points within this State. The National Railways now have a branch line running 135 miles from Durango City northward to Tepehuanes. The promoters intend to connect with the National Railway system at Tepehuanes and continue on northward about 65 miles to Guanecevi. I understand that the concern has secured the State government concession and that active construction work is to begin in a few months. It is estimated that more than 1,000,000 acres of valuable timber land will be accessible to this railroad. Guanecevi, the proposed terminal, is one of the richest silver camps in the State and is now shipping about 2,000 tons of ore per month, where the only means of transportation is by mule or burro. The freight rate by the burro route to Tepehuanes, the nearest railroad point, is \$12 to \$15 per ton; by the proposed railroad it will not be over \$2.50 per ton. This will give a

most powerful impetus to the mining industry in northern Durango, as it will enable the successful treatment of large quantities of ore which are now thrown out upon the mine dumps as not being of sufficient value to justify the present high cost of transportation to the smelter. It is planned also to throw out branch lines to several other important mining camps in the northern part of the State, and to connect eventually with the Mexican Central branch line terminating at Rosario.

Several other new railroads are contemplated in this State which have not yet reached the constructive stage. Probably the most important is the proposed line from Tepehuanes westward through the important mining camp of Topia and down the Pacific slope of the Sierras to connect with the Southern Pacific system at Culiacan. The State is alive to the necessity of railroad construction, and the lines in construction, with those contemplated, will do much toward developing its rich natural resources and will make quite a railroad center and distributing point of the city of Durango.

[From Consul Clement S. Edwards, Acapulco.]

New Pacific Coast Railway.

A beginning has been made for the opening up of this resourceful west coast country. Through the enterprise of an American corporation known as the Mexican Pacific Railway Co., whose principal offices are at Seattle, Wash., a railroad along the coast from Acapulco to Zihuatanejo is now under construction. The greatest difficulty encountered in this construction was in the first 10 miles out from Acapulco, it being necessary at one point to pierce the mountain with a tunnel 300 feet in length. The tunnel lies at a point about 3 miles from Acapulco and the ascent to this point is at a 2 per cent grade. The tunnel has now been completed and the grading for the greater part of about 10 miles likewise completed and ready for the ties and rails. The stretch of road between the city and the tunnel was completed and formally "opened" on February 15, when a train consisting of an engine and a gaily decked flat car arranged with seats carried the business men and officials of Acapulco for the first time over the site of the ancient trails to the tunnel, where the simple opening ceremonies were concluded.

The work of construction beyond a point about 10 or 12 miles distant from Acapulco is considered light. The line when finished will skirt the coast for nearly 150 miles and traverse a region wonderfully rich in agricultural and horticultural possibilities, and will at the same time parallel the mountain ranges abounding in merchantable timber.

Due to the disturbed condition of the country during the past year, the work of railway construction was completely suspended during certain months and at no time was the enterprise pushed with the vigor which more settled conditions would have permitted.

The Line to Balsas.

During the past year a concession was granted by the Government to this same company, or to men interested in it, for building a railroad from Zihuatanejo to the Balsas, a town upon the river of the same name, the Government granting a subvention of \$6,000 gold per kilometer (0.62 mile). It is now learned, although the com-

pleted arrangements have not yet been made public, that the Mexican Pacific Co. has disposed of its entire railroad interests in the State, including this last concession, to an English company and that the members of the former company will retire completely. This line when completed therefore, will connect Acapulco with Mexico City, and as its course is planned beyond Zihuatanejo it will follow the banks of the Balsas River to the town of that name, penetrating a region rich in mines and mining possibilities.

Some additional details of this enterprise from the Mexican Herald follow:

Capital Arranged For.

Arrangements have just been completed for raising \$40,000,000 gold for constructing the Mexican Pacific Railway between Balsas, Zihuatanejo, and Acapulco in the State of Guerrero.

The project includes the construction of two large cement docks to cost \$1,250,000 at Zihuatanejo and Acapulco which will be capable of accommodating the largest vessels in use on the Pacific coast trade.

The line, as projected, will run from Balsas, with direct communication with the City of Mexico, to Hacienda de Balsas, 185 miles, thence to the Pacific coast, which it will follow to Zihuatanejo, and thence to Acapulco, a total distance of 450 miles. An 80-mile branch will also be constructed to Uruapam, and a spur will probably be run from this branch to connect with the large copper mine at Inguaran.

To Employ Thousands.

The preliminary surveys and exploration work have been already been completed, and about 5 miles of grading have been finished at Acapulco. Work has been partially suspended during the recent disturbances, but the engineers in charge of the work have kept a force of at least 500 men busy all the time, and they anticipate no shortage of labor when conditions become more settled. It is planned to have 6,000 men working within the next few months.

The capital already available is \$30,000,000, which has been provided by the largest financial interests in England and France, and American financiers also are concerned in the undertaking. The president of the company is an American millionaire (Mr. Thomson, of Seattle, Wash.).

Feat of Engineering.

The importance of the line is great, as it opens up practically a virgin country rich in minerals, timber, and agricultural lands. Many difficulties will have to be met in crossing the mountains and from an engineering point of view to complete the line will be a colossal undertaking.

The concession calls for the line to be in operation in seven years from the signing of the contract, but it is confidently estimated that the work will be finished in four or five years.

The docks which it is proposed to construct at Acapulco and Zihuatanejo will form perfect harbors, as the natural advantages of these points are exceptional. Acapulco in particular, it is claimed, possesses an anchorage second only to Sydney, Australia, the finest harbor in the world. The bottom of the harbor at Acapulco shelves upward from 600 to 100 feet depth, and Zihuatanejo is almost similar. Preparatory work has already commenced on the docks at Acapulco.

[From Mexican Daily Herald.]

Canadian Company for Power Plant.

The Mexican Midland Light & Power Co. has recently been incorporated in Canada under the laws of the Province of Ontario to work the concessions granted to the Compañía Hydro-Eléctrica Mexicana, S. A. The concessions authorize the development of the waterfalls of the Rio Naranjo and the Rio Blanco for the purpose of generating electric power. The acquisition of these concessions, it is stated, secures for the company a practical monopoly for the supply of hydroelectric power over a great part of central and the whole northeastern Mexico, and the concessions give the right to transmit power anywhere throughout the republic.

The horsepower available from the Rio Naranjo, with the construction of only one small reservoir will, it is said be 65,000 during the whole year and that from the Rio Blanco is stated to be 35,000, which it is intended to develop after the completion of

Rio Naranjo. It is asserted that this combined 100,000 horsepower can easily be increased up twice the amount at a relatively small cost.

Already an important contract for the sale of power has been entered into. One contract has been signed by the parent company for the supply of 20,000 horsepower at \$75 gold per horsepower per annum. The company is said to be in negotiation with the principal power consumers of various towns, including Tampico, San Luis Potosi, and Monterey, and it is believed that there is already a market for all power to be generated by the company.

URUGUAY.

[From Consul Frederic W. Goding, Montevideo.]

The First Drawbridge in Uruguay.

On May 1, 1912, a new and important public work was officially inaugurated—the drawbridge over Las Vacas Creek, at Carmelo, the first of the kind in the country, which will be of the greatest possible future benefit to this rich and fertile district.

The drawbridge has two arms of equal length, similar in structure and size, as regards the rotary part, to the Parnitz at Stettin, and the Niederboum at Hamburg. The most interesting part of the bridge is its foundations, built by means of dikes, with water-tight divisions open at the top, which by their dimensions, on account of the great density of the water, may be counted among the most notable examples of this system, as it is rarely that the weight or water flow, which it must resist, overcomes it. The drawbridge has two navigable passages. The length of the rotary section is 118 feet, and of the arms 6.6 feet by 59 feet. The weight of the movable part is 300 tons, total width 26 feet, length 246 feet.

The work has been under the direction of a local engineer. The building of the bridge was done by the Government, after having called for the requisite three tenders, which were canceled because they exceeded the estimate given. [Illustrations of the bridge are filed for public reference at the Bureau of Manufactures.]

KOREA.

[From Consul General George H. Scidmore, Seoul, Chosen.]

Electric Enterprises in Korea.

It is announced by the Seoul press that the Japanese firm of Okura & Co. (a Tokyo firm) has made arrangements, under Government permission granted on May 66, for installing on the Chongchon River an electric plant to supply the demands of the mining district of north Pyongan Province.

The scheme contemplates the supply of motive power, tram service, and lighting, and contracts have been already entered into with the Oriental Consolidated Mining Co., the Chosen Mining Co. (both American), and others for the supply of over 2,000 horsepower. I am informed by representatives of these companies that this arrangement is considered of great advantage, in view of increased cost and growing scarcity of wood for fuel.

The coal to be used in the work will be supplied from Manchuria, where Okura & Co. control the output of the Penshu Colliery. The machinery required will be obtained from Germany. Okura & Co. are the sole agents for Japan of the Allgemeine Elektrizitäts Gesellschaft, of Berlin.

FORMOSA.

[From Consul Samuel C. Reat, Tamsui, Taiwan, May 8.]

Contract for Capitol Building.

The Public Works Department of the Formosan Government informs me that it will, within this month, enter into a contract with the Trussed Concrete Steel Co., of Detroit, for the crection of a capitol building in Taihoku. The details of the contract have not been fully decided upon, but the cost of construction will be approximately \$250,000. The structure will be 254 by 435 feet and four stories high. The Kahn system will be employed. The American Trading Co. (Tokyo branch) will sign the agreement on behalf of the contractors. This undertaking was first reported by this consulate in Consular and Trade Reports for June 30, 1910. The plans, slightly altered, were made by a graduate of the engineering department of the Tokyo Imperial University. He was awarded the second prize of \$500 for his design. [A blue print of the plans has been filed for public inspection with the Bureau of Manufactures at Washington.]

ROUMANIA.

[From American Minister John B. Jackson, Bucharest.]

Municipal Improvements at Bucharest.

The Bucharest municipal council has practically decided to issue bonds for \$1,158,000 of the \$5,790,000 loan [referred to in Daily Consular and Trade Reports for Apr. 20 and May 21] which was authorized by Parliament before its adjournment. It is proposed to expend the proceeds during the current fiscal year, according to the following apportionment: Continuation of sewer system, \$250,900; construction of water filters, \$7,720; installation of electric-power plant, \$133,170; slaughterhouse, \$84,920; paving and providing drinking water, \$212,300; construction of schools, crematories, and markets, \$96,500.

SWITZERLAND.

[From Consul F. B. Keene, Geneva.]

Railroad Over the Furka Pass.

The construction of the Brigue (Valais)-Dissentis (Grisons) railroad, connecting the two upper valleys of the Rivers Rhone and Rhine over the Alpine passes of Furka and Oberalp, is actively pushed forward, especially between Brigue and Fiesch (15½ miles), where engineering works are numerous and important. A 1½-mile tunnel was to be drilled under the Furka Pass to avoid the highest point, but difficulties were encountered which caused a change of plans, now being considered.

Construction Work in Canton of Geneva.

The Swiss Federal Railroad Department in Berne, under which management the Lausanne station is now being entirely rebuilt, will next year undertake the same operation in Geneva. The present station of Geneva-Cornavin will be replaced by a modern building, to cost about \$4,825,000. Furthermore, a junction line connecting the two Geneva stations (Cornavin and Eaux-Vives) is to be constructed in the next few years at a cost of about \$4,632,000, two-thirds being paid

by the Confederation and the remaining third by the Canton of Geneva. The Confederation will also have to pay the expenses (\$530,750) called for by extension of tracks between the Cornavin station and the goods station at Chatelaine and for works at the Eaux-Vives station (\$386,000).

All the foregoing works are consequent to the assignment of the 6½ miles of railroad track from Geneva city to the French border from the Paris-Lyon Mediterranean Railroad Co., the present owner, to the Swiss Federal Railroads.

RUSSIAN NOTES.

[From Consul General John H. Snodgrass, Moscow.]

Copper Ore in Nova Zembla.

A telegram from Odessa states that parties possessing the claim for working copper ore in the island of Nova Zembla had signed a contract with an Odessa banker, who advances \$100,000 on certain conditions for working the mines. It is said that the prospectors received a number of propositions from Russian, English, and German firms, offering the necessary funds.

A series of analyses made with samples of this ore are reported to have proved that it contained up to 40 per cent pure copper. A special steamer will take engineers and workmen, mostly from the Ural, to Nova Zembla. One group will investigate the Bay Propashaya, where copper ore was discovered last year, while the other will work through southern Nova Zembla.

Transportation of Meat in Refrigerator Cars.

In view of the confirmation of the special Russian railroad rate of 1 kopeck per pood and verst (one-half cent per 36.11 pounds per two-thirds of a mile) for meat transportation, the railway management presents the question of introducing special regulations for this traffic to the congress of railway representatives, which is soon to take place.

The administration proposes that—

(1) The transportation of meat in such cars can only be admitted in certain directions, as it is necessary to have icing houses at the stations of transit, and goods can not be accepted for transportation in other directions where no such icing arrangements exist. (2) Rules must be established according to which the forwarders are to inform the station of the arrival of the car of meat. (3) The regulations must indicate that the charge includes the cost of ice and the amount thereof. For the decision of these questions it is proposed to admit representatives of the meat trade.

NATIONAL EDUCATION CONVENTION.

Discussion of the establishment of a Federal university to be supported by Government funds will be renewed at the fiftieth annual meeting of the National Education Association, which is to be held at Chicago from July 6 to 12. The National Education Association is the largest organization of its kind in the world, and not less than 50,000 are expected to be in attendance at this meeting. Other topics to be taken up include industrial education, manual training and art, the American high school, the relation of the public schools to social welfare work and to public health, and rural life conditions and education.

THE URUGUAYAN BUDGET.

[From American Minister N. A. Grevstad, Montevideo, May 4, 1912.]

The budget committee of the lower house of the General Assembly has presented its report on the budget of expenditures for 1911-12, and the report is now being discussed.

The last budget regularly adopted was that for the fiscal year 1908-9, which is still in force, having been extended from year to year. The budget for the current fiscal year should have been adopted before June 30 of last year, but its consideration by the General Assembly has been postponed from time to time. As presented to the General Assembly in May of last year by the Minister of Finance, the budget called for an expenditure of 28,533,019 pesos. [The Uruguayan peso is equivalent to \$1.034 United States currency.] Meanwhile, legislation calling for extraordinary expenditures was passed, and in September the Minister of Finance submitted an amended budget totaling 30,433,975 pesos. Since then more legislation, necessitating heavy outlays, has been enacted, until the budget as now reported by the committee of the House has reached the high figure of 34,676,306 pesos, as compared with 21,075,351 pesos in the budget of 1908-9. The increase in these three years amounts to 9,600,000 pesos, allowing for 4,000,000 pesos for special services not scheduled in the earlier budget.

The appropriations for the present year are divided as follows: Legislative power, 582,967 pesos; Presidency, 86,107 pesos; Interior, 3,261,756 pesos; Foreign Affairs, 599,389 pesos; Finance, 2,049,702 pesos; Public Instruction, 3,100,725; Industries, 1,403,783 pesos; Public Works, 1,369,082 pesos; War and Marine, 4,676,474 pesos; Judicial power, 363,686 pesos; national obligations, 17,182,635 pesos. No estimate of revenue has been reported as yet in either house of the General Assembly.

CLASSIFYING NATIONAL RESOURCES.

[Announcement of United States Geological Survey.]

The classification of the mineral wealth of the public domain is being steadily carried forward by the survey. Three years ago the land classification board was created. During May the survey classified nearly 2,500,000 acres of lands which had been withdrawn from public entry as coal lands. Of these, 126,751 acres were appraised as coal land, with a valuation of \$3,045,019, and 15,742 acres were classified as coal lands, but the prices not fixed. There were also classified as noncoal land 2,221,749 acres. New coal-land withdrawals of 23,003 acres were also made in Colorado, and restorations of lands that had been withdrawn pending classification were made to the extent of 107,319 acres in Utah, Washington, and Wyoming. The withdrawal of 597,591 acres of land in Wyoming, supposed to be underlain with phosphate rock, was also made, on the basis of geologic investigations. Power-site reserves were also created in Oregon and Washington to the extent of 2,362 acres, and public water reserves were created in Utah, covering 440 acres.

The total area of coal land which has been classified and valued in individual 40-acre tracts by the land board of the survey since its organization has been 16,174,200 acres, valued at \$721,856,656. The price at which this land would be subject to sale to-day had not this classification and valuation been done—the minimum valuation under the coal-land law—would be \$275,673,800, the difference in favor of the Government under the present policy being therefore \$446,172,856.

The land board has also classified as noncoal land more than 52,000,000 acres, and has made new coal-land withdrawals, based on geologic evidence, of 68,962,497 acres. Oil lands have been withdrawn to the extent of 4,774,182 acres, phosphate lands over 3,000,000 acres, and power sites nearly 2,000,000 acres.

VENEZUELAN IRON-ORE DEPOSITS.

[From Consul Thomas W. Voetter, La Guaira.]

Near the place where the Imataca Mountains approach the south canyon or pass of the Orinoco Delta are the Imataca mines now being exploited by the Canadian-Venezuela Ore Co. (Mackenzie-Pearson interests), the ore being shipped to Philadelphia. [Reference to the new port established near these mines was made in Daily Consular and Trade Reports on Jan. 22 and Feb. 26, 1912.] Farther inland along the river are other large deposits which have been denounced [the name of the concessionaire being obtainable from the Bureau of Manufactures]. I have been informed by a mining expert who has been looking for copper and lead, but not iron, that these deposits are hematite ore; there is also some limonite. They are very close to the river bank so that transportation would be easy. One of the characteristics of ore in this region is its good quality, it containing no phosphorus, little sulphur, and having some tungsten in addition.

[From Consular Agent W. D. Henderson, Ciudad Bolivar.]

The Imataca Ore Co.

The following account of the development of the Imataca iron mines appeared in a recent issue of the Port of Spain (Trinidad) Mirror:

The Imataca Ore Co. commenced prospecting some 18 months ago, and actual operations, with a view to exploration, began last November. Since then the *Alabama*, of 1,100 tons, has made three trips from Philadelphia with machinery and supplies, returning once in ballast and twice with a full cargo of ore.

The equipment brought down for handling and loading the ore is of the most modern design, being entirely operated by electricity generated in a 1,000-horsepower station equipped with Babcock & Wilcox boilers and other appliances. Two endless rope haulage tramways, one from the east and one from the west, will transport the ore from the different tunnels and open cuts to a central hill, where the cars will run out to a tippie trestle and be dumped into large pockets excavated in the hill on either side of the trestle, and each capable of holding 10,000 tons of ore. Beneath each of these pockets are tunnels of reinforced concrete with chute openings, whereby the ore may be run out to an endless rubber belt conveyor. This belt conveyor will carry the ore to a pier and elevate it to a trestle whence a chute will pour a steady stream of ore into the waiting steamer. By this means a 13,000-ton steamer will be loaded in about four hours. The rope tramways and conveyers are operated by 100-horsepower electric motors.

For construction and repairing purposes the company has an excellent machine shop, with the best of modern machine tools, a woodworking shop, and a sawmill. A large warehouse and store and a refrigerating plant are also a part of the equipment. All dwellings and buildings are constructed of expanded metal and concrete, and are both sanitary and cool.

At the present time the east tramway, power house, and pockets are well under way, and a few months more will see them in full operation. The company is giving employment to some 400 laborers, mechanics, and miners, recruiting from all parts of Venezuela, British Guiana, and the West Indies. This labor has proved very satisfactory, and the supply seems ample, for as the mines are better known, the daily ingress of men is increasing. So far the only actual mining has been temporary open-cut work, sufficient to load the supply steamer with a return cargo.

The ore found at Imataca is of a very pure and superior quality, averaging as high as 67 per cent, and when in full operation the company hopes to have an output of 1,000,000 tons a year. This will be handled largely by the company's own steamers, of a special design to give a maximum tonnage with a minimum draft to cross the Orinoco Bar. The bar and the river as far as the mine will be laid with gas buoys and other assistance to navigation.

A map of North America, 28 by 38 inches, has been issued by the United States Geological Survey, Washington, D. C., by which it is sold at 20 cents each, or 12 cents each in wholesale quantities.

BRITISH INDUSTRIAL NOTES.

[From Consul Church Howe, Manchester.]

New Crushing Mill at Manchester Docks.

The plant of the British Oil & Cake Mills (Ltd.), was opened on June 4, and marked the beginning of a new and important industry for the port of Manchester. The cost of the construction of the mill has been about \$364,987. Its capacity is 600 tons of seed per week, and provision is being made for equipment to turn out three times this quantity. Supplies of seed will be brought via the Manchester Ship Canal to the very doors of the mill, which is situated in one of the most populous districts in England, and where at present there is a good market for the articles produced.

Direct Trade with Pacific Coast.

A representative of the Maple Leaf Steamship Co. lately visited this port to investigate the possibilities of direct trade between San Francisco and other Pacific ports and Manchester.

It is expected that with the opening of the Panama Canal there will be a very considerable development in trade. The Manchester district is an ideal center for the distribution of canned goods, fruit, timber, ores, grain, and many other products shipped from the Pacific coast, and it is not unlikely that in the near future Manchester will become one of the ports of call for the steamers of this line.

Fines in Lancashire Factories.

The Blackburn Chamber of Commerce has been considering a bill suggesting the abolition of fines in the local factories. It has been stated that cotton employers had urged the members of all Lancashire districts to oppose the measure. Taking the figures for 3 months applying to 425 mills, employing 95,000 weavers, earning £1 (\$4.86) per head, they show that the fines amounted to less than 1 cent each person per week.

During a discussion of the subject it was stated by one of the members of the chamber of commerce that he did not believe abolition would benefit the workpeople. In times when surplus labor obtained it would act against their interests, leading to discharges for faults now covered by fines.

Children's Parks Games.

The Manchester Education Committee has sanctioned a plan whereby it is proposed that the children in certain day schools shall be taken periodically to the parks for recreation and organized games. The scheme is in the nature of an experiment, and at present applies only to seven schools, all of which are in the central and congested areas of the city. Schools in the more outlying regions do not come under the arrangement.

On Mondays, Tuesdays, Thursdays, and Fridays it is intended to give parties of the city-dwelling children a few hours in the open, and every child in the seven schools will spend one afternoon a week in this way. The whole of what would be the afternoon school hours will be taken up, and the actual time in the park, apart from the journey there (which will be made, where necessary, in special street cars), will be devoted to organized games under the superintendence of the teachers and such nature study and botany as can feasibly be introduced.

RAILROAD TIE SCARCITY IN AUSTRALIA.

[From Consul General John P. Bray, Sydney, May 15; in continuation of report in Daily Consular and Trade Reports for Feb. 16, 1911.]

The Works Department of the State of New South Wales recently called for a supply of railroad ties to be used in connection with an extension of the line from Wagga to Tumbarumba, this State. Over 70,000 ties were required, and despite the fact that the needs of the Works Department were duly advertised, no one has as yet made the offer to supply them.

It would thus appear that the local supplies of hardwood are being steadily reduced; for hundreds of thousands of hardwood ties have been and are still being exported from this State to the other States of the Commonwealth as well as oversea, and it is now becoming a serious question as to where the supplies required for local consumption will be drawn from. Assuredly there is still a fair supply of growing timber suitable for this purpose, but it is only a matter of time when, unless the greatest care be taken of reforestation, it will be necessary for the Works Department and also the Railroad Department to purchase their requirements from districts beyond the State borders. This condition of affairs is peculiarly interesting in view of the fact that the railroad lines of the State are controlled and operated by the State Government and not by private companies or corporations.

INDUSTRIAL SCHOOL WORK.

Needing more money for their schools than was being raised by taxation, the inhabitants of Wake County, N. C., adopted the unique expedient of cultivating the land surrounding the schools, the money obtained from the sale of the crops being used for the benefit of the school. Seventeen such school farms were operated last year. They were worked by 1,200 persons—men, women, and children—who contributed their labor free. The net gain from the enterprise was nearly \$1,200. This new movement to raise additional funds for the country school is described in a monograph just issued by the United States Bureau of Education for free distribution.

Hay Crop of Southern Ireland.

Under date of June 6 Consul G. E. Chamberlin, of Cork, reports that hay crop indications in southern Ireland point to a yield above the average. He states that grass started early, and that there has been sufficient rain to give it vigorous growth, adding: "Should the present favorable weather conditions continue for the next 30 days, the yield will be much above that of last year, and of good quality."

Swedish-Japanese trade.—American Minister Charles H. Graves, of Stockholm, advises that the daily press of that city recently stated that, according to the annual report of the Swedish consulate general in Japan, Sweden's exports to Nippon during the last three years amounted to: In 1909, \$1,007,870; 1910, \$1,523,680; 1911, \$1,748,575. In 1911 Norway's shipments to Japan are said to have aggregated \$241,295 and Denmark's \$10,820.

FOREIGN PAPERS FOR ADVERTISING AMERICAN GOODS.

[For previous series see Daily Consular and Trade Reports for Nov. 27, 1911, and Jan. 6 and Feb. 6, 1912. Unless otherwise stated, the papers in the following lists are printed in Russian and the rates quoted are reduced to United States currency.]

RUSSIA.**BATUM.**

[By Consul Alexander Heingartner.]

The principal imports into this consular district are chemicals, machinery, manufactured goods, tea, tin plates, tin, lime, spelter, lead, and wine and spirits, while the leading exports are carpets and rugs, corn and flour, iron, licorice root, oil cake, petroleum products, silk, cocoons, skins, tobacco, and wool. There are no trade papers in the Caucasus. The leading newspapers are reported below. All of them are four-page papers, the first page being devoted almost entirely to advertising. A discount of 40 per cent from the rates quoted is allowed for advertising on the fourth page.

Batum News, Batum. Daily. Advertising rates, about \$51.50 per one-fourth column per month (column $2\frac{1}{2}$ by $22\frac{1}{2}$ inches). Annual subscription price, \$3.60. Circulation, 4,000.

Transcaucasian Herald, Tiflis. Daily. Advertising rates, about \$51.50 per one-quarter column per month (column 3 by $22\frac{1}{2}$ inches). Annual subscription price, \$3.60. Circulation, 1,500.

Tiflis News, Tiflis. Daily. Advertising rates, about \$51.50 per one-quarter column per month (column $2\frac{1}{2}$ by $22\frac{1}{2}$ inches). Annual subscription price, \$2.50. Circulation, 10,000.

Baku, Baku. Daily. Advertising rates, about \$51.50 per one-quarter column per month (column $2\frac{1}{2}$ by 25 inches). Annual subscription price, \$3.60. Circulation, 8,000.

Caspian, Baku. Daily. Advertising rates, about \$51.50 per month per one-quarter column (column $2\frac{1}{2}$ by $22\frac{1}{2}$ inches). Annual subscription price, \$4. Circulation, 8,000.

MOSCOW.

[By Consul General John H. Snodgrass.]

Cotton spinning and weaving constitute the most important industry in the consular district of Moscow. The principal exports from the district during 1910 were crash, furs, crude glycerin, hair, hides and skins, rubber, and wool. The following news and trade papers issued in the district might be used advantageously for advertising the various lines of American products:

Russkoye Slovo, Moscow. Leading daily newspaper, representing all lines of trade. Advertising rates, 45 cents per line (nonpareil) per insertion preceding reading matter; special rates for special positions and repeated insertions. Annual subscription price, \$3.50. Circulation, 200,000, of which 80,000 copies are distributed outside of Moscow, among all classes.

Golos Moskvi, Moscow. Daily newspaper, representing all lines of trade. Advertising rates, 30 cents per line (brevier) per insertion preceding reading matter. Annual subscription price, \$4.50. Circulation, 20,000, principally in Moscow and its manufacturing suburbs, among employees of mills, factories, and other industrial concerns.

Russkiya Vedomosti, Moscow. Daily newspaper, representing all lines of trade. Advertising rates, 30 cents per line (brevier) per insertion preceding reading matter; special rates for special positions and repeated insertions. Annual subscription price, \$5. Circulation, 55,000, of which 25,000 copies are distributed outside of Moscow. Articles are contributed to this paper from time to time by Moscow University professors.

Utro Rossii, Moscow. Daily newspaper, representing all lines of trade. Advertising rates, 30 cents per line (brevier) per insertion on the first page; special rates for special positions and repeated insertions. Annual subscription price, \$3.50. Cir-

culation, 35,000, principally in Moscow and its manufacturing suburbs, among employees of mills, factories, and other industrial concerns.

Isvestia Moscovskago Obschestva Dlia Nadsora Za Parovimi Kotlami, Moscow. Monthly journal, representing the technical and mechanical industries where steam power and steam engineering are employed. Advertising rates, from \$3 per one-sixteenth page to \$17.50 per full page per insertion (type page 7½ by 11½ inches); special rates for special positions and repeated insertions. Annual subscription price, \$2.50. Circulation, 3,000, among employees of mills and factories, steam fitters, boiler makers, and technical engineering offices.

Vyestnik Manufakturi i Promishlennosti, Moscow. Semi-monthly journal, devoted to manufacture and industry. Advertising rates, from \$2.50 per one-eighth page to \$12.50 per full page per insertion following the text (type page 5½ by 9½ inches); special rates for special positions and repeated insertions. Annual subscription price, \$3. Circulation, 2,000, among employees of mills and factories and technical engineering offices.

Automobilist, Moscow. Semimonthly journal, devoted to the automobile industry. Advertising rates, \$2.50 per one-eighth page per insertion (type page 7 by 10 inches); special rates for special positions and repeated insertions. Annual subscription price, \$2.50. Circulation, 4,000, among those interested in the automobile trade.

Bannee Outro, Moscow. Daily newspaper, representing all lines of trade. Advertising rates, 35 cents per line (brevier) per insertion, first page. Annual subscription price, \$4. Circulation, 30,000, principally in Moscow and its manufacturing suburbs, among employees of mills, factories, and other industrial concerns.

Volgar, Nijni-Novgorod. Daily newspaper, representing all trades and industries of the Bi-Volga country. Advertising rates, 15 cents per line (brevier) per insertion on the first page, 6 cents per line on the fourth page. Annual subscription price, \$4. Circulation, 25,000, among employees of manufacturing and industrial firms.

Saratovsky Vyestnik, Saratov. Daily newspaper, representing all trades and industries of the Volga country. Advertising rates, 10 cents per line (brevier) per insertion, preceding the text; third and fourth pages, 3½ cents per line. Annual subscription price, \$3.50. Circulation, 20,000, among manufacturing and industrial firms.

Volzhskoye Slovo, Samara. Daily newspaper, representing all lines of trade. Advertising rates, 10 cents per line (brevier) per insertion, preceding the text; 5 cents per line following the text. Annual subscription price, \$3.50. Circulation, 15,000, among employees of mills, factories, and other industrial concerns of Samara and its manufacturing suburbs and the Volga country.

Kazansky Telegraph, Kazan. Daily newspaper, representing all lines of trade. Advertising rates, 20 cents per line (brevier) per insertion on the first page; fourth page, 10 cents per line. Annual subscription price, \$4.50. Circulation, 12,000, among employees of mills, factories, and other industrial concerns in Kazan and its manufacturing suburbs and the Volga country.

ODESSA

[By Consul John H. Groat.]

Agricultural implements and machinery, coal, copra, raw cotton, ironware, jute, nuts, oranges and lemons, paints, raisins, rosin, wax, breadstuffs, oil cake, seeds, sugar, vegetables, wood, and wool were imported into the consular district of Odessa during 1910, and corn, glue, hides, oil, iron ore, rubber, tea, tobacco, and wool were exported therefrom. Agricultural implements and machinery form an important line of American trade in this region, and the manner in which several American agricultural implement houses have organized the trade and secured permanent footing should give a good example to other manufacturers whose lines would find a market here if properly presented.

Every town or city located within the Odessa consular district, which comprises a large part of southern Russia, is well supplied with news and trade papers, and in the matter of advertisements all seem to be well patronized. A large portion of the first page of the newspapers is devoted to advertising, and, unless otherwise stated,

the rates quoted for advertising in the following lists are for space on that page. The papers are generally printed in brevier type. Among the principal papers of the district the following may be mentioned as reliable and prominent publications:

Odesski Listok, Odessa. Daily newspaper. Advertising rates, 8 to 20 cents per line per insertion. Annual subscription price, \$5. Circulation, 13,000.

Odesskiya Novosti, Odessa. Daily newspaper. Advertising rates, 8 to 20 cents per line per insertion. Annual subscription price, \$5. Circulation, 16,000.

Commercial Bulletin, Odessa. Monthly journal, published by the Odessa Bourse, devoted to the local grain and other markets. Annual subscription price, \$5. Circulation, about 1,000.

Kievskaya Mysl, Kief. Daily newspaper, considered to be a good medium for advertisers. Advertising rates, for run of column, 15 cents per line per insertion; 8 cents per line for repeated insertions. Annual subscription price, \$5.50. Circulation, about 20,000.

Kievskay Potshta, Kief. Daily newspaper. Advertising rates, 25 cents per line per insertion. Annual subscription price, \$4. Circulation, about 10,000.

Nikolaievskaya Gazeta, Nicolaief. Daily newspaper. Advertising rates, 8 cents per line per insertion. Annual subscription price, \$3.50. Circulation, about 10,000.

Troudovaya Gazeta, Nicolaief. Daily newspaper. Advertising rates, 15 cents per line per insertion next to reading matter. Annual subscription price, \$2.50. Circulation, about 7,000.

Yuzhni Krai, Kharkof. Daily newspaper. Advertising rates, 15 cents per line per insertion; 7½ cents per line on the last page; discounts for large space. Annual subscription price, \$5.65. Circulation, about 24,000.

Utro, Kharkof. Daily newspaper. Advertising rates, 15 cents per line per insertion; 7½ cents per line on the last page; discounts for large space. Annual subscription price, \$4.65. Circulation, about 17,000.

RIGA.

[By Vice Consul Laurance Hill.]

Chalk, coal and coke, cotton, dyewoods, fertilizers, herrings, iron, jute, lard, lead, machinery, sulphur pyrites, and tanning woods are among the principal imports into Riga. The trade journals which might be used advantageously for advertising the various lines of American products are reported below:

Rigaer Boersenblatt, Riga. Daily commercial journal, published by the Chamber of Commerce and circulating among its members and the mercantile community. Advertising rates, 4 cents per line (brevier) per insertion (column 2¼ inches wide). Annual subscription price, \$7.50. Circulation, 600.

Rigasche Industrie-Zeitung, Riga. Semimonthly technical journal, organ of the Riga Technical Society, and publishing articles on technical subjects gathered from all countries. Its readers are the members of the Society, comprising technical directors and owners of large factories, architects, civil and mechanical engineers. Advertisements of special machinery and the like can not fail to attract the attention of interested persons, and it is considered that should American manufacturers contemplate bringing their lines to the notice of the provincial technical trade a better medium can not be found. Advertising rates, from \$2 per one-twelfth page to \$12.50 per full page per insertion (type page 7 by 10 inches); discount for repeated insertions. Annual subscription price, \$2.65. Circulation, 500.

ST. PETERSBURG.

[By Consul Jacob E. Connor.]

The principal industry in St. Petersburg is the manufacture of cotton textiles. The shipping of St. Petersburg increased from 1,996 ships, of 1,897,863 registered tons, entered in 1909, to 2,054 ships of 1,941,766 tons, in 1910. The principal articles of export during 1910 were oats, oil cake, fertilizers, wheat, rye, butter, and petroleum. The leading news and trade papers published in the district are given

below. (A newspaper directory of Finland was forwarded with the consul's report, and will be loaned to those interested upon request to the Bureau of Manufactures.)

Mercator (English, Swedish, and Finnish editions), Helsingfors, Finland. Devoted to commerce and circulating among business men, bankers, and importers and exporters. Advertising rates, \$7 per one-quarter page per insertion (type page 6 by 9 inches). Annual subscription price, \$5.

Torgovo-Promyshlennaya Gazeta, St. Petersburg. Daily newspaper, devoted to commerce, industry, and finance. Advertising rates, 25 cents per line (brevier) per insertion, first page; 10 cents per line last page. Annual subscription price, \$6.

St. Petersburg Zeitung (German), St. Petersburg. Daily newspaper, containing a commercial section. Advertising rates, 10 cents per line (brevier) per insertion, advertising page. Annual subscription price, \$7.

Novoye Vremya, St. Petersburg. Daily newspaper. Advertising rates, 90 cents per line (nonpareil) per insertion, first page; 50 cents per line last page. Annual subscription price, \$9.

Nasha Okhota, St. Petersburg. Semimonthly journal, devoted to hunting, shooting, and fishing sports. Advertising rates, \$2 per one-quarter page per insertion, after text (type page 5 by 8 inches). Annual subscription price, \$2.50.

Automobile, St. Petersburg. Semimonthly journal devoted to the automobile trade. Advertising rates, per one-eighth page (type page 7 by 10½ inches): One insertion, \$7.75; three insertions, \$19.25; six insertions, \$30.90. Annual subscription price, \$2.50.

Aero, St. Petersburg. Semimonthly journal devoted to the aeroplane trade. Advertising rates, per one-eighth page (type page 7 by 10½ inches): One insertion, \$5; three insertions, \$12.50; six insertions, \$22. Annual subscription price, \$2.50.

Dvigatel, St. Petersburg. Semimonthly journal devoted to the motor-vehicle trade. Advertising rates, per one-eighth page (type page 7 by 10½ inches): One insertion, \$5; three insertions, \$12.50; six insertions, \$20. Annual subscription price, \$4.

VLADIVOSTOK.

[By Consul Lester Maynard.]

Agricultural machinery, building material, cement, coal, drugs and chemicals, fruits, iron manufactures, metal ware, oil, provisions, rice, salt, and tea are the principal imports into this consular district. No trade papers are published in eastern Siberia.

Dalny Vostok, Vladivostok. Daily newspaper. Advertising rates, 13 cents per line (brevier) per insertion, first page. Annual subscription price, \$4.50. Circulation, about 2,000.

Dalekia Okraina, Vladivostok. Daily newspaper. Advertising rates, 13 cents per line (brevier) per insertion, first page. Annual subscription price, \$4.50. Circulation, about 1,200.

WARSAW.

[By Vice Consul Witold Fuchs.]

The manufactures of Warsaw include metallic wares, machinery, food products, chemicals, matches, spirits, shoes, and tobacco. The annual imports of American agricultural implements and machinery are estimated at \$900,000, typewriters about \$45,000, and wringers, hardware, and miscellaneous American goods at \$350,000 to \$400,000. Flax and tow, hair, and wool are the principal exports to the United States. (The name of an agent in Poland for American agricultural machinery has been submitted by the consul at Warsaw and will be furnished upon application to the Bureau of Manufactures.)

Kurjer Warszawski (Polish), Warsaw. Daily newspaper, morning and evening editions, established in 1821. Advertising rates, 8 cents per line per insertion. Annual subscription price, \$4.50. Circulation, 40,000.

Nowa Gazeta (Polish), Warsaw. Daily newspaper, morning and evening editions, established in 1864, containing latest stock-exchange quotations and special articles

on commercial matters: Advertising rates, 8 cents per line per insertion. Annual subscription price, \$4.50. Circulation, 18,000.

Slowo (Polish), Warsaw. Daily evening newspaper. Advertising rates, 15 cents per line (brevier) per insertion. Annual subscription price, \$3. Circulation, 22,000.

Gazeta Rolnicza (Polish), Warsaw. Illustrated weekly, established in 1860; official organ of the Central Agricultural Society of Poland, and is devoted to agriculture. Advertising rates, 8 cents per line (brevier) per insertion, before reading matter. Annual subscription price, \$4.50. Circulation, 3,500.

Tygodnik Ilustrowany (Polish), Warsaw. Illustrated weekly, devoted to art and literature. Advertising rates, 20 cents per line (nonpareil) per insertion, first page; 10 cents on other pages. Annual subscription price, \$4. Circulation, 23,000.

Swiat (Polish), Warsaw. Illustrated weekly journal of current events. Advertising rates, 15 cents per line (nonpareil) per insertion, before reading matter. Annual subscription price, \$4. Circulation, 23,000.

Przegląd Techniczny (Polish), Warsaw. Weekly technical journal. Advertising rates, from \$1 per one-sixteenth page to \$7.50 per page per insertion (type page 8 by 12½ inches); discounts up to 35 per cent for annual contracts. Annual subscription price, \$5. Circulation, 2,000.

Wies Ilustrowana (Polish), Warsaw. Monthly journal illustrating country life. Advertising rates, \$19 per one-fourth page per insertion before reading matter (type page 6½ by 9½ inches). Annual subscription price, \$5. Circulation, 5,000.

EXPORTS FROM CALCUTTA.

[From official Indian Trade Journal.]

With the advent of the Tata Iron Works as a producer of pig iron, there has been a considerable increase in exports of this material from Calcutta. In April the quantity rose from 1,657,600 pounds to 8,637,096 pounds, of which 8,190,336 pounds went to foreign ports, chiefly Hongkong and Japan; during May there was a still further expansion. Cotton exhibited some development in April; the raw material rose from 2,557,072 pounds to 5,150,544 pounds, valued at \$551,540, going principally to Germany and Japan; cotton twist and yarn expanded from 77,200 to 399,600 pounds, of which 73.68 per cent went to China and Hongkong; cotton piece goods were only valued at \$940,860, but altogether cotton and its manufactures attained a value in the month of \$616,420. To Indian ports cotton twist and yarn rose from 477,544 pounds to 1,270,000 pounds. The demand from the West for both hides and skins is strong, and prices have advanced considerably; during April shipments rose in volume by 4.53 per cent, and the value of \$3,050,000 was greater by 20.56 per cent. The quantity of lac exported increased by 395,808 pounds to 4,314,912 pounds, but owing to lower prices the value, \$587,873, was actually smaller.

Consular Correction.

Correcting the report on "Composition floorings of magnesium chloride," published in Daily Consular and Trade Reports on April 17, 1912, Vice Consul General E. H. L. Mummenhoff, of Hamburg, advises that the quotations on page 231 for "raw" magnesite should read "lump calcined" magnesite, and the quantity should be the metric ton of 2,204.6 pounds. He adds: "The price of raw magnesite quoted in Hamburg on May 10 was \$7 to \$7.50 per ton c. i. f. New York, the difference in price being caused by fluctuations in the rate of freight."

The Bagdad Railway.

A Berlin dispatch from Constantinople states that the Turkish Ministry of Public Works, having finally approved the plans for the Mediterranean port of the Bagdad Railway at Alexandretta and the branch line from Toprak-kale to Alexandretta, work was begun at Alexandretta on June 10.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9094. Machinery for concentrating gold ore.**—An American consul reports that a company of European capitalists has two agents examining certain mining properties, with a special view to discovering copper, iron pyrites, and magnesite. These agents have come across some gold ore which, in the opinion of the mining engineer, would pay to develop. Samples of this ore will be assayed, and if the results are satisfactory work will be commenced immediately. The ore seems to be an alluvial deposit, composed of fine particles of quartz, sand, and clay. The mining engineer referred to has requested catalogues, price lists, and other particulars regarding machinery for concentrating gold ore.
- No. 9095. Disinfecting apparatus, pumps, and street-cleaning equipment.**—A foreign Government official is actively interested in all cholera preventatives and in ways and means of combating contagious diseases in general. At present a large city over which he has control is without spray pumps, stationary and portable steam disinfecting devices, street-sweeping machines, sheet-iron dump carts, etc. Catalogues embracing articles for purposes as above outlined should be sent to the American consul who furnished this information for transmission to the proper authorities.
- No. 9096. American goods of various kinds.**—A business firm has written an American consular officer that it would be pleased to receive from American manufacturers and exporters catalogues, price lists, terms, etc., of the following articles, in which it is particularly interested: Clocks, footwear, general provisions, salmon, biscuits, aluminum ware, cinematograph films, umbrellas, Panama hats, musical instruments, gramophones and accessories, lamps, lighting apparatus, confectionery, etc.
- No. 9097. Grain, lumber, tobacco, furniture, cotton goods, and hardware.**—An American consul reports that a commission agent whose firm has enjoyed a good reputation for many years desires to obtain catalogues, samples, and terms of sale for the agency of any or all of the following articles, for which there is a constant and growing demand in the country in question: Corn, wheat, wood for construction purposes, tobacco (Virginia and Kentucky) for cigarettes, cigars, and smoking, cotton cloth, iron and steel goods, hardware, furniture of all kinds, lard in pails (28 pounds each), soap, etc. The firm is prepared to furnish satisfactory references.
- No. 9098. Windmills and pumps.**—A communication has been received by an American consular officer in an Asiatic country from a business firm in his district requesting catalogues of American windmills and pumps. The firm is desirous of importing these articles, and would like to receive from American firms their best trade discounts.
- No. 9099. Railroad and harbor construction.**—An American consular officer has forwarded a report regarding a comprehensive plan of a foreign Government for railroad building, harbor construction, and other public works involving the expenditure of considerable sums of money. As a field for profitable investment the consular officer believes this proposition is particularly entitled to consideration and should receive the careful attention of American capitalists. The official in charge of this matter is favorable to American participation, and the time seems especially opportune for action. Further details can be obtained from the Bureau of Manufactures.
- No. 9100. Harbor works.**—Tenders will be received by the Town Council, Reykjavik, Iceland, until August 31, 1912, for the construction of a harbor at that port, including the construction of three moles, two steamboat piers, and dredging works.
- No. 9101. Railway rolling stock.**—The Italian State Railways, Rome, Italy, invite tenders for 200 carriages (49 first, 97 second, and 54 third class), 2,000 wagons type F, and 1,800 wagons type L, half with and half without brakes, and 100 open trucks. Tenders will be accepted through local agents only.

DAILY CONSULAR AND TRADE REPORTS

ISSUED BY THE BUREAU OF MANUFACTURES, DEPARTMENT OF COMMERCE AND LABOR

15th Year

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TRADE OF BRITISH INDIA PORTS.

BOMBAY.

[By Consul Edwin S. Cunningham.]

The Bombay consular district includes the Bombay Presidency, exclusive of Sind, with an area of 79,768 square miles and a population of 15,304,677; the native states within this limit, with an area of 62,939 and a population of 7,262,430; the dominion of the Nizam of Hyderabad, with an area of 82,698 square miles and a population of 11,141,142; and the Portuguese possessions of Goa, Daman, and Diu, with an area of 1,470 square miles and a population of 531,798. Within the British Presidency proper are the cities of Bombay, population 979,445; Ahmedabad, 185,889; Poona, 153,320; Surat, 119,306; 5 others with over 50,000; and 297 with over 5,000 population. The population of the British district is very dense, ranging from 160 per square mile in the central division to 256 per square mile in the northern division, but the density of population is no criterion of the commercial and industrial importance of western India, as the people are poor and have few wants.

Three-fourths of the population of the Presidency are dependent on agriculture, which is conducted by primitive methods. During the fiscal year ended March 31, 1911, the cropped area in Bombay Presidency was 24,236,480 acres, of which 19,000,000 acres were devoted to food crops and the rest to cotton. The principal crops are rice, wheat, barley, millet, ragi, corn, and a few other cereals and pulses, cotton, sugar cane, tobacco, sesamum seed, linseed, safflower, rapeseed, groundnuts, etc. Cotton is by far the most valuable product. The average yield per acre of clean rice is 1,050 pounds; wheat, 533 pounds; barley, 680 pounds; and corn, 869 pounds.

Increased Industrial Activity—General Foreign Trade.

The number of active factories in the district was increased from 520 to 548 during the fiscal year 1910-11, of which 431 were connected

with the cotton industry. In 1911 there were 86 cotton mills in the city of Bombay, employing 104,550 hands, and 98 more in the Presidency outside the city, employing 55,251 hands. In the various factories 10,816 children were employed.

The total foreign and coasting trade of the Bombay Presidency amounted to \$610,921,501 in 1910-11 against \$538,869,510 in the preceding year. Almost all of this trade passes through the port of Bombay, that city's share being divided as shown in the following table:

Trade.	1909-10	1910-11	Trade.	1909-10	1910-11
Imports:			Coasting trade:		
Foreign merchandise.....	\$128,217,894	\$153,575,010	Imports.....	\$49,385,476	\$59,035,324
Treasure.....	96,309,208	105,786,032	Exports.....	45,541,659	47,931,872
Exports:			Total coasting trade.....	94,927,135	106,967,206
Indian produce.....	171,658,743	193,903,313			
Treasure.....	16,676,200	18,005,659	Grand total sea-borne trade.....	516,333,278	588,821,958
Reexports of foreign merchandise.....	8,544,098	10,584,738			
Total foreign trade.	421,406,143	481,854,752			

NOTE.—In this table, and in the 1910-11 statistics in the other tables of this report the rupee has been converted at 32.44 cents. In the tables of imports and exports by articles, the figures for 1909-10 were converted on the basis of 33½ cents, causing a slight exaggeration in the figures for that year.

In point of the distribution of trade the United Kingdom and British possessions remained in practically the same position as in 1909-10. Their combined share in the trade of Bombay was 43.15 per cent, that of the United Kingdom alone being 31.69 per cent. The trade of Bombay with the countries of continental Europe shows a larger proportionate increase, effected chiefly at the expense of China and Japan. The aggregate share of the Continental countries rose from 27 to nearly 32 per cent of the total trade of the port.

Transshipment Trade—Movement of Treasure.

The increase in the reexports of foreign merchandise indicates renewed trade activity between Bombay and the ports of the Persian Gulf and the East African littoral. Some alarm had been felt as to Bombay's position as an entrepôt, as it appeared some years ago to be losing some of this trade through the establishment of direct lines, but returns began to show an improvement three years ago. The bulk of the reexports consists of sugar, metals, provisions, and apparel, and their destinations are the Persian Gulf, Arabia, Asiatic Turkey, and the East African littoral. Reexports to Europe represent only about 20 per cent of this trade.

The imports of gold coins amounted to \$38,784,728, a decrease of \$1,815,140 from the 1909-10 figures, while the imports of bar, bullion, and other gold showed a gain of \$12,628,794, and amounted to \$36,904,754. The increase in the exports of treasure was chiefly due to large shipments of sovereigns. Taken in connection with a slight decrease in the net consumption of silver, the increase in the importation of bar gold leads to the belief that it is displacing silver as a form of hoarding in India. The imports of silver showed a slight decrease and the exports a small increase. Most of the

bar gold imported came from England, the rest being sent from Australia.

General Import Statistics.

The values of the articles imported into Bombay, exclusive of treasure and Government stores, during the two years ended March 31, 1911, are shown by the following table:

Articles.	1909-10	1910-11	Articles.	1909-10	1910-11
Animals, live.....	\$444,520	\$1,145,859	Ivory.....	\$1,031,544	\$960,084
Apparel.....	3,115,801	4,257,021	Jewelry.....	2,962,953	2,729,577
Arms and ammunition.....	207,982	271,005	Jute, and manufactures of.	106,996	162,995
Art works.....	76,234	74,571	Leather, and manufactures of.	627,368	662,857
Books and printed matter.	507,391	539,224	Liquors.....	1,794,627	1,768,715
Building material.....	567,276	609,211	Matches.....	733,989	893,788
Candles.....	58,412	57,778	Metals, n. e. s.....	13,366,727	18,065,294
Carriages and motor cars.	1,349,958	1,659,377	Oilcloth.....	117,987	168,311
Caoutchouc.....	158,588	148,408	Oils.....	3,227,925	3,615,929
Chemicals.....	810,918	871,270	Paints and colors.	700,778	789,364
Clocks and watches.....	275,259	285,403	Paper and pasteboard.	1,439,838	1,594,945
Coal.....	1,901,223	1,498,375	Provisions.....	3,441,490	3,765,134
Cordage and rope.....	105,922	70,672	Seeds.....	162,519	148,520
Cotton, and manufactures of:			Silk, and manufactures of:		
Raw.....	1,065,892	593,308	Manufactured.....	5,279,043	6,609,926
Twist and yarn.....	4,510,799	3,224,250	Raw.....	2,661,054	2,295,007
Manufactures.....	29,977,471	38,524,046	Soap.....	588,034	627,578
Drugs and medicines.....	1,972,723	1,412,974	Spices.....	1,199,444	1,181,983
Dyeing and tanning materials.....	2,628,605	3,201,890	Stationery.....	737,855	819,286
Earthenware, etc.....	433,343	521,788	Sugar.....	10,666,069	12,246,258
Fireworks.....	110,839	204,742	Tallow.....	246,420	252,059
Flax, and manufactures of.	220,383	300,936	Tea.....	473,619	560,001
Glass and glassware.....	1,991,312	2,435,300	Tobacco.....	504,312	340,351
Grain and pulse.....	583,189	280,668	Toys, etc.....	440,140	529,081
Gums and resins.....	440,818	471,073	Umbrellas, etc.....	231,578	326,721
Hides and skins.....	426,399	395,231	Wood, and manufactures of:		
Hops.....	26,716	35,267	Furniture.....	228,617	271,180
Instruments, etc.....	1,070,260	1,360,405	Other.....	1,320,804	1,518,552
Iron and steel, and manufactures of:			Wool, and manufactures of	3,567,371	4,962,638
Hardware and cutlery.	3,032,091	3,862,229	Imports by parcel post.....	3,284,516	2,857,071
Machinery and mill-work.....	6,580,951	5,712,030	All other articles.....	228,928	2,009,316
Railway plant.....	5,654,840	6,137,728	Total.....	131,748,760	153,575,010

Successful Agricultural Year—Labor.

The agricultural season of 1910-11 was successful, being the third in succession of a series of good monsoons, and the crops yielded bountifully from a slightly increased acreage. The production of cotton, owing to frost in the northern districts, was only slightly above that of the preceding year, although the acreage was increased from 3,740,000 to 4,239,000, but the higher price realized more than compensated for the small yield per acre. The food crops were above normal. An increased acreage of wheat produced 40,000 tons more than the previous crop. The area planted to sugar cane decreased by 2,000 acres, while that under tobacco remained practically the same, increasing in districts especially adapted to its cultivation and decreasing in others. The area under cultivation for oilseeds increased 53,000 acres.

Labor was in general demand, at slightly higher wages. Every industry showed satisfactory results except the cotton mills, which had one of the most unfortunate years in their experience, owing to outside influences. Some 25 mills on the island of Bombay shut down and others curtailed their forces or cut down the number

of hours. Some of the mills were forced into liquidation. The resulting throwing out of work of many wage earners would have been serious had it not been for the strong demand for labor in other lines. As it was, the burden fell heaviest on the capitalists who were unable to pay the high price for cotton to keep their mills running.

Refined Sugar—Metals and Machinery—Tobacco Imports.

Receipts of beet sugar declined, while Mauritius sugar practically regained its hold on the Indian market during 1910-11, which was thought to have been threatened by imports from Java during the preceding year. These two countries supplied practically the entire importation, valued at \$12,246,258, although small shipments were received from Austria and Hongkong. The high prices of sugar continued in 1910 until the publication of the forecast of the beet crop and broke in September.

Increases were shown in the imports of all the principal items of metals and manufactures of metal except millwork and machinery, in which a decrease was caused by the smaller imports of textile machinery. The increases in the other items were due to larger shipments, often at lower prices, rather than to increases in price. Of the total imports of cutlery, sewing machines, agricultural and other implements, enameled ironware, lamp ware, and other hardware, aggregating \$3,862,228, the United States supplied \$192,102 and the United Kingdom \$2,127,475. The imports of textile machinery decreased from \$3,668,099 in 1909-10 to \$2,482,778 in 1910-11. Since railways are now being built for the development of the country, the increased imports of railway material indicate the satisfactory industrial condition of the Empire.

As 1910-11 was the first year since the increase of the duty on tobacco, the imports of this article are of interest. The total imports of tobacco dropped from 738,481 pounds, valued at \$490,796, in 1909-10 to 349,739 pounds, valued at \$340,353. Unmanufactured tobacco disappeared entirely from the imports from the United Kingdom, although 5,610 pounds came from the United States. A low-priced grade of cigarettes had been supplied by the United States, and the higher duty caused a decline in these from 62,181 pounds of American cigarettes in 1909-10 to 1,372 pounds in 1910-11.

Effect of Tariff on Oil Imports—Raw Materials—Cotton Imports.

Notwithstanding a duty of 3 cents per gallon which went into effect in 1910-11, the imports of foreign kerosene increased from 19,718,457 gallons, valued at \$2,423,974, in 1909-10, to 20,445,668 gallons, valued at \$2,637,917. Kerosene forms the most important item in the imports from the United States, and the receipts of the American product rose from 12,782,457 gallons, with a value of \$1,564,531, to 13,231,063 gallons, valued at \$1,606,567. The increase in the imports of foreign oil was insignificant, however, when compared with the gain from 11,050,224 gallons, valued at \$1,648,931, in 1909-10, to 16,308,773 gallons, valued at \$2,304,304, in 1910-11, made by the imports of duty-free Burma kerosene.

Among the raw materials decreases were noted in coal, cotton, and silk, and increases in timber, wool, raw hides, and skins. The de-

creased imports of coal from the United Kingdom and Natal were accompanied by an increase in the consumption of Calcutta coal.

Overimportation in the preceding year and the increased local production accounted for the decrease in the imports of cotton twist and yarn. During 1910-11 Japan appeared for the first time as a supplier of cotton yarn for India, furnishing 293,837 pounds, valued at \$122,610, of which 83,600 pounds were mule yarn above No. 50, and the balance unspecified. Unlike yarns, the imports of piece goods increased greatly, prints and colored goods showing the greatest gains. The imports of cotton goods during 1909-10 and 1910-11 are shown in the following table:

Classification.	1909-10		1910-11	
	Quantity.	Value.	Quantity.	Value.
	<i>Yards.</i>		<i>Yards.</i>	
Colored.....	181,000,000	\$11,029,089	238,000,000	\$15,692,280
Gray.....	177,000,000	7,989,686	198,000,000	9,774,764
White.....	162,000,000	7,942,715	197,000,000	10,326,600

The Japanese met the local requirements in cotton hosiery and had almost a monopoly in that trade.

Small Imports of American Shoes—Carriages and Motor Cars—Other Imports.

Of 657,776 pairs of shoes imported during 1910-11 the United States supplied only 421 pairs, an indication that this market has not been exploited by the American manufacturers as fully as those in other parts of the world. The consumers of imported shoes here are not very different from those living in places where the American article is in particular demand. The imports of shoes were from the following countries, in pairs: United Kingdom, 327,692; Austria-Hungary, 127,074; Japan, 8,821; Germany, 55,927; Spain, 18,984; Italy, 31,731; Norway, 4,080; Sweden, 3,136; France, 1,880; and Belgium, 1,494.

The increase in the imports of carriages and motor cars was largely due to the increased demand for automobiles and motor cycles. Of a total of \$1,659,377, the United States supplied \$31,366, which practically represents only its share in the automobile trade.

In clocks and watches the imports from the United States amounted to \$43,063; in leather goods, excluding boots and shoes, \$29,351; in paints and colors and painters' materials, \$14,375; and in wood, \$6,607. Of the total imports, the United States furnished only \$3,415,557, a mere fraction of the amount which it could supply if this huge market was properly exploited.

Review of the Export Trade.

While the exports of Indian goods did not show as great a percentage of increase as did the imports, they indicate great prosperity in this Presidency. The principal increases were in raw materials and unmanufactured articles, the increased value of the raw cotton shipments representing almost one-half of the total increase. The exports of seeds and of cotton twist and yarn also exceeded the \$25,000,000 mark. A comparison of the values of the principal

exports in the fiscal years 1909-10 and 1910-11 is given in the following table:

Articles.	1909-10	1910-11	Articles.	1909-10	1910-11
Apparel.....	\$138,902	\$167,666	Oils.....	\$264,884	\$345,298
Books and printed matter.	110,651	117,728	Opium.....	8,186,909	6,974,574
Cotton, and manufactures of:			Provisions.....	910,803	981,751
Raw.....	74,967,357	84,820,711	Seeds.....	30,312,842	42,177,571
Yarn and twist.....	30,213,876	26,551,834	Silk, and manufactures of.	128,454	85,886
Manufactures.....	3,846,669	4,225,257	Spices.....	315,708	658,660
Drugs and narcotics.....	382,612	486,662	Sugar.....	101,539	120,287
Dyeing materials.....	259,553	208,106	Tea.....	238,171	249,239
Fodder, bran, etc.....	261,929	263,189	Toys, etc.....	61,637	69,192
Fruits and vegetables.....	217,136	235,651	Wood, and manufactures of:		
Grain and pulse.....	8,745,661	7,772,791	Furniture.....	73,208	79,267
Gums and resins.....	194,358	286,085	Other.....	103,527	149,720
Hemp, raw.....	998,495	870,607	Wool, and manufactures of:		
Hides and skins.....	4,647,077	3,703,393	Raw.....	4,041,710	4,121,496
Horns and horn meal.....	226,545	45,586	Other.....	302,761	391,874
Jute goods.....	153,580	194,620	All other articles.....	1,529,913	3,104,592
Manure.....	467,783	493,355			
Metals.....	2,254,206	2,511,011	Total.....	176,385,885	193,903,313
Myrobolans.....	1,315,092	1,538,364			

Grain Exports—Manganese Ore—Dyestuffs and Tanning Materials.

Grain and pulse, the most important item of food products among the exports, showed a considerable decrease in 1910-11. Wheat is sold principally to the United Kingdom, while large quantities reach France and other European countries. Wheat flour showed a decided increase in exports, going chiefly to the Red Sea, Turkey, Aden, Ceylon, Egypt, and in smaller quantities to British East Africa, Zanzibar, Persia, Germany, and German East Africa, in the order named. The quantities exported during the past two years are shown in the following table (hundredweight = 112 pounds):

Classification.	1909-10	1910-11
Wheat.....	Cwt. 2,247,183	Cwt. 2,579,406
Flour, wheat.....	424,585	498,645
Rice.....	685,711	496,320
Gram.....	120,979	47,848
Other.....	858,049	731,722

Most of the exports classed as metals consisted of manganese ore, of which 8,989,768 hundredweight, valued at \$2,366,680, were exported during the fiscal year 1910-11, against 7,651,972 hundredweight, valued at \$2,070,928, in 1909-10. Of the exports in 1910-11, the United Kingdom took 3,006,163 hundredweight, the United States 2,123,000, Holland 2,000,605, and Belgium 1,461,000 hundredweight. The ore is used chiefly for the manufacture of steel, and this export is gaining not only with the general trade revival, but also with the increased use of steel. The shipment of this ore has insured the sailing of an average of one vessel a month direct to the United States. These vessels carry whatever general cargo is offered, as well as the ore. With the ore trade as a nucleus, the establishment of more regular sailings from this port to the United States might be worthy of consideration by persons interested in the trade between the United States and India.

The United States took 167,577 hundredweight of myrobolans, valued at \$226,422 and 744 hundredweight of turmeric, valued at \$3,306, out of total exports of 1,129,300 hundredweight of myrobolans and 37,296 hundredweight of turmeric. The myrobolan trade with the United States is capable of considerable expansion.

Good Trade in Raw Cotton and Piece Goods—Yarns Weak.

The exports of raw cotton showed a slight decline in quantity, the total being 6,213,317 hundredweight in 1909-10 and 6,188,890 hundredweight in 1910-11, but the value rose from \$74,967,357 to \$84,820,711. Prices ruled high and mill owners found the year depressing, as cotton manufactures did not show a corresponding rise. Good broach cotton ranged in price from 9.8 to 13.56 cents per pound in 1909-10 and from 11.72 to 15.26 cents in 1910-11 at Bombay. The distribution of the cotton exports during the two fiscal years is shown by the following table:

Countries.	1909-10	1910-11	Countries.	1909-10	1910-11
	<i>Cwt.</i>	<i>Cwt.</i>		<i>Cwt.</i>	<i>Cwt.</i>
United Kingdom.....	243,000	271,000	Germany.....	624,000	805,000
Austria-Hungary.....	521,000	541,000	Italy.....	656,000	882,000
Belgium.....	563,000	654,000	Japan.....	2,688,000	2,272,000
France.....	408,000	392,000			

The shipments of cotton yarn and twist were 37,762,231 pounds below those of 1909-10. There was an increase in the production of yarn and twists of counts above 26s, but the total output of all counts below that decreased. China purchased the greatest amount of yarn and twist and the exchange value of the tael is said to have been against India during the entire year. As, however, the exports to Hongkong increased in both value and quantity, it is doubtful if exchange affected the exports as much as the high prices of cotton. The exports were also affected by shortage in the manufacture of certain kinds that are exported to various parts of China by Japanese competitors and by the diminution of the Chinese demand on account of famine.

While yarn and twist declined, the shipment of manufactured cotton improved, and the exports of cotton piece goods reached the highest figures on record. Indian cloths are always in demand and compete to a certain extent in quality and kind with those manufactured in other parts of the world. The foreign markets for these goods are small in comparison with the total local output. During 1910-11 the total production of woven goods was 860,000,000 yards, of which about 75,000,000 yards were exported. Gray piece goods made up 55,218,823 yards of the total exports. The foreign market is found almost entirely on the East African littoral.

Heavy Shipments of Seed—Hides and Skins.

More than half of the seed exports of India go through Bombay, and the total exports during the year under review amounted to 17,019,414 hundredweight, against 13,973,536 hundredweight in 1909-10. Seed shipments to the United States were: Castor, 51,421 hundredweight; linseed, 27,000 hundredweight; mustard, 600 hun-

dredweight; rape, 500 hundredweight. The United Kingdom, France, and Belgium purchased more than 75 per cent of the total exports.

The United States was the principal purchaser of skins from Bombay, taking 2,143,826 goat and 39,150 sheep skins during 1910-11 of the total exports of 2,666,284 skins. Only 400 hides were taken by the United States, probably on account of the existence of anthrax in India during this period, as the quarantine laws would reduce the quantity shipped direct to America.

Imports from the United States.

The imports into Bombay from the United States during the fiscal years 1909-10 and 1910-11 are shown in the following table:

Articles.	1909-10	1910-11	Articles.	1909-10	1910-11
Agricultural implements and machinery.....	\$1,120	\$2,296	Hides and skins, dressed.....	\$4,421	\$4,936
Ale, beer, etc.....	207	834	Implements and tools.....	8,075	17,390
Arms and ammunition.....	5,512	5,158	Instruments:		
Automobiles and motor cycles.....	16,050	28,631	Electrical.....	1,572	1,725
Bicycles.....	194	457	Musical.....	8,581	13,795
Books.....	6,718	11,283	Optical.....	1,790	2,885
Boots and shoes.....	1,613	866	Scientific.....	5,815	7,340
Building material.....	2,187	4,313	Surgical.....	5,180	5,964
Carriages and carts.....	2,946	2,278	Leather, and manufactures of.....	18,362	32,045
Clocks and watches.....	49,969	43,064	Machinery and millwork.....	33,652	106,619
Confectionery.....	1,780	2,600	Metals, and manufactures of:		
Cotton, and manufactures of:			Steel.....	31,978	236,324
Raw.....	3,375	42,173	Other.....	4,722	27,432
Piece goods—			Oils:		
Colored.....	41	1,683	Kerosene.....	1,564,531	1,606,567
Gray.....	407,246	329,561	Lubricating.....	305,557	270,313
White.....	2,639	1,080	Other.....	60,204	73,666
Cutlery and plate.....	4,763	14,356	Paints and colors.....	11,337	14,375
Drugs and medicines:			Paper and pasteboard.....	5,641	8,322
Proprietary and patent medicines.....	31,142	32,160	Printing material, etc.....	6,913	5,563
Quinine.....	23	11,875	Provisions.....	16,751	15,240
Other.....	7,731	11,018	Soap.....	9,470	13,667
Engines:			Sewing machines.....	13,017	23,256
Electrical.....	5,582	6,188	Spirits.....	51,465	51,567
Mining.....	3,800	.....	Stationery.....	18,413	19,024
Steam.....	316	5,753	Tobacco, and manufactures of:		
Textile.....	31	3,350	Cigarettes.....	20,839	603
Foodstuffs.....	2,351	4,751	Cigars.....	.....	.....
Fruits and vegetables.....	620	635	Other.....	17,312	7,173
Furniture, etc.....	9,407	11,502	Toys, etc.....	15,826	30,920
Glass and glassware.....	2,354	2,854	Typewriters.....	26,337	35,454
Gums and resins.....	23,271	7,854	Wood, manufactures of.....	2,520	6,607
Hardware.....	77,989	115,157	All other articles.....	45,614	68,352
Haberdashery and millinery.....	4,789	6,633	Total.....	3,011,120	3,417,653

There are opportunities here for the sale of light hardware and light agricultural implements and machinery. The people here can not manage the heavy machinery which is so well adapted to conditions in the United States and most other parts of the world, nor are the small farms suitable for its use. Light machinery and tools may be sold if properly introduced, but should be protected by patent.

Bombay seems to offer a good opening for an American shoe shop handling ladies' and gentlemen's shoes of medium price. The most expensive kinds would not find a sale. The merits of American shoes are well known and recognized by Parsees and others, as well as by the European residents. At present shoes are extensively manufactured on a small scale by native shoemakers. Many shoe shops here carry what they call American shoes, claiming that they are made on American lasts and are American style, although made in some other country.

Exports to the United States.

The exports to the United States during the calendar years 1910 and 1911, as invoiced at this consulate, were as follows:

Articles.	1910	1911	Articles.	1910	1911
Carpets and rugs.....	\$87,065	\$83,840	Herbs.....	\$18,785	\$34,522
Capsicum.....		48,074	Hides and skins.....	924,175	1,219,374
Condiments, etc.....	8,510	9,914	Mace.....	11,021	1,275
Cotton, and manufactures of:			Nuts:		
Raw.....	248,849	62,217	Cashew.....	41,443	65,743
Piece goods.....	915	5,536	Myrobolans.....	261,343	196,601
Waste.....	76,627	109,167	Oils.....	18,795	13,349
Yarn.....	8,668	4,601	Ore, manganese.....	626,857	403,370
Curios and brassware.....	8,436	15,832	Pearls.....		4,755
Drugs.....	11,254	28,579	Seeds:		
Fish maws (isinglass).....	33,840	15,373	Castor.....	58,252	607,864
Ginger.....		10,028	Flax.....	8,565	465,059
Gums:			Other.....	4,352	24,847
Asafetida.....	11,367	14,100	Wool.....	1,966	6,108
Kadaya.....	13,494	28,673	All other articles.....	16,644	14,810
Other.....	12,844	19,509	Total.....	2,514,067	3,593,026

Shipping.

The clearances from the ports of the Bombay Presidency during 1910-11 numbered 593 steam vessels, of 1,651,026 tons, and 133 sail ships, of 16,419 tons, as compared with 571 steam, of 1,587,145 tons, and 105 sail, of 11,671 tons, in 1909-10. No vessel flying the American flag visited this port during the year. An increase in the steamer entrances and clearances in the coasting trade and a decrease in the number of sailing vessels seem to indicate that the coasting trade of Bombay is being carried on more by steam vessels than in former years.

KARACHI.

[By Consul Stuart K. Lupton.]

From a trade standpoint 1911 was a record year for the Karachi consular district, both imports and exports having exceeded all previous records. The wheat, cotton, and oilseed crops were good and the exportation of all these commodities was heavy. The total private trade, exclusive of Government transactions, was \$123,767,075, of which \$44,749,844 was imports and \$79,017,231 exports. The imports in 1910 amounted to \$38,805,659 and the exports to \$69,873,772. The principal items entering into the export trade in 1911 were as follows (ton = 2,240 pounds):

Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
Bones..... tons..	23,647		Hides and skins..... tons..	5,096	\$2,562,327
Chromite..... do.....	3,939	\$47,162	Rapeseed..... do.....	170,255	7,627,115
Cotton..... bales..	250,218	12,467,406	Wheat..... do.....	1,062,723	33,732,016
Gingelly (sesame)..... tons..	33,308	2,122,121	Wool..... do.....	19,928	6,747,170

Review of Import Trade.

Sugar was, as usual, one of the most important imports, amounting in 1911 to 140,094 tons, valued at \$9,519,932, an increase of 25,579 tons and \$1,795,859 over the preceding year. Most of the sugar imported here is cane sugar from Mauritius and Java, although the imports of beet sugar from Germany, Austria, and Russia are increasing each year. The importation would have been much larger had

not several cargoes consigned to Karachi been sent direct to Europe without being entered, owing to the sudden rise in European prices.

Metal imports showed a satisfactory increase over 1910, with the exception of brass and lead, which declined slightly. Steel imports showed an advance of 9,989 tons over the 1910 figures, one great cause of the gain being the increased use of steel beams in buildings, owing to the increased cost of wood.

In spite of the increased duty on kerosene, the foreign oil imports showed an increase of 2,058,167 gallons over 1910. The imports of Indian oil rose from 2,997,898 gallons, valued at \$387,214, in 1910, to 3,897,648 gallons, valued at \$471,318, in 1911.

Cotton manufactures make up a large portion of the imports of this port, but only a relatively small share of these imports consist of twist and yarn for the use of mills in the Punjab. Indian gray or unbleached piece goods have almost displaced the foreign article. In addition to the direct imports from abroad, there were also brought in cotton goods to the value of \$15,054,723 by coasting vessels, as follows:

Articles.	Foreign.	Indian.
Twist and yarn.....	\$78,300	\$1,030,419
Piece goods:		
Colored.....	939,308	3,249,338
Gray.....	540,892	6,990,740
White.....	1,421,983	743,258
Other.....	71,792	95,643
Total.....	3,052,335	12,002,388

Owing to increased port charges at Karachi, the Northwestern Railway made arrangements to avoid shipping its coal by way of this port, this being largely responsible for the decrease of 179,534 tons in the total coal imports. In addition to the foreign coal imported, 244,141 tons of Indian coal, valued at \$1,021,971, were brought in, as compared with 420,799 tons in 1910. The quantities and values of the leading imports of foreign merchandise during the calendar year 1911 were as follows:

Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
Coal and coke..... tons..	13,998	\$373,192	Kerosene..... gallons..	10,006,670	\$1,522,076
Metals:			Cotton, and manufactures of:		
Brass..... tons..	146	59,521	Twist and yarn.....		709,733
Copper..... do..	1,057	393,087	Piece goods—		
Iron..... do..	7,491	456,895	Colored.....		6,145,761
Lead..... do..	185	20,729	Gray.....		2,275,780
Steel..... do..	46,959	1,795,926	White.....		7,594,852
Zinc..... do..	187	22,217	Other.....		376,676
Other..... do..	87	59,979	Sugar..... tons..	140,094	9,519,932

Government Trade.

The customs returns give the Government imports during the fiscal years 1909-10 and 1910-11 as follows:

Articles.	1909-10	1910-11	Articles.	1909-10	1910-11
Arms, ammunition, etc...	\$223,875	\$395,194	Metals:		
Canvas.....	84,958	19,933	Steel.....	\$175,811	\$310,294
Carriages and carts.....	39,513	6,522	All other.....	19,815	75,375
Cement.....	29,945	48,896	Rails, etc.....	1,076,063	585,441
Coal, coke, etc.....	95,152	45,666	Railway carriages, etc.....	1,441,959	950,396
Hardware and cutlery.....	229,839	157,626	Sleepers:		
Instruments.....	151,273	152,055	Wooden.....	481,821	59,994
Locomotives, etc.....	2,420,740	844,910	Other.....	890,336	223,633
Machinery and millwork..	278,870	268,937	Unmanufactured articles.	54,885	66,905
Metals:			All other articles.....	572,801	525,336
Copper.....	54,180	53,484	Total.....	8,436,925	5,002,771
Iron.....	115,089	193,184			

In addition to the foregoing, treasure to the amount of \$48,011 was imported in 1909-10 and \$2,919 in 1910-11.

Imports During the Fiscal Year.

According to the customs returns, the private imports into the port of Karachi during the two years ended March 31, 1911, were as follows:

Articles.	1909-10	1910-11	Articles.	1909-10	1910-11
Animals, live.....	\$8,209	\$6,010	Metals, and manufacture:		
Apparel.....	638,376	837,617	of:		
Arms, ammunition, etc.....	65,140	123,188	Hardware, cutlery,		
Books and printed matter.....	37,942	42,699	and plated ware....	\$568,894	\$799,373
Building material.....	104,784	103,574	Metal.....	2,114,409	2,148,146
Chemicals, drugs, and			Machinery and mill-		
narcotics.....	848,949	713,523	work.....	666,540	607,823
Coal.....	9,923	75,400	Railway stores and		
Cotton manufactures:			rolling stock.....	1,914,704	279,299
Twist and yarn.....	443,580	465,996	Oils.....	1,552,997	1,282,889
Piece goods—			Paper.....	204,502	251,736
Gray.....	1,806,816	1,597,110	Precious stones and pearls	13,560	24,979
White.....	4,337,364	7,326,175	Seeds.....	3,200	4,106
Dyed and prints.....	3,998,234	6,131,417	Silk, manufactures of.....	124,902	150,114
Other.....	336,185	410,027	Vehicles.....	151,373	193,101
Earthenware and porce-			Wood, and manufactures		
lain.....	47,954	56,910	of:		
Flax.....	26,935	29,707	Furniture.....	69,335	56,980
Foodstuffs and drinks:			Other.....	128,905	59,204
Grain.....	4,967	2,873	Wool, and manufactures		
Hops.....	7,955	12,156	of:		
Liquors.....	663,560	685,851	Raw.....	12,004	11,159
Provisions.....	868,532	1,021,717	Manufactured.....	788,966	1,603,075
Sugar, etc.....	7,897,172	8,449,949	All other articles.....	1,286,105	1,315,050
Spices.....	14,094	9,069			
Glass.....	268,493	330,320	Total.....	32,342,662	37,383,892
Instruments and appe-					
raturs.....	157,102	165,571			

The total foreign trade of Karachi in 1910-11 amounted to \$106,-001,084, of which \$57,887,174 was with the United Kingdom, \$10,-077,270 with Germany, \$7,680,240 with Belgium, \$7,932,588 with France, \$3,270,470 with Austria-Hungary, \$1,529,948 with Italy, \$9,315,615 with Asiatic countries, and \$2,112,241 with Africa, the rest being scattered.

Trade with the United States.

According to the customs statistics, the imports into Karachi from the United States were as follows:

Articles.	1909-10	1910-11	Articles.	1909-10	1910-11
Cabinet ware.....	\$3,698	\$313	Instruments and apparatus:		
Chemicals and drugs.....	5,467	4,624	Electrical.....	\$1,315	\$1,476
Clocks and watches.....	5,958	6,940	Musical.....	420	1,072
Foodstuffs and drinks:			Other.....	879	1,187
Farinaceous foods.....	5,341	8,041	Oils:		
Hops.....	3,113	.....	Kerosene.....	1,023,187	710,440
Other.....	5,732	5,302	Lubricating.....	80,709	6,744
Metals, and manufactures of:			Other.....	3,085	8,441
Hardware and cutlery....	17,494	36,039	Piece goods, gray.....	221,889	215,040
Machinery—			Soap.....	1,297	2,391
Agricultural.....	1,165	.....	Tobacco, and manufactures of	17,408	8,460
Electrical.....	364	3,084	Typewriters.....	426	1,941
Metals—			All other articles.....	13,181	15,734
Iron.....	106	3,746			
Steel.....	48	8,536	Total.....	1,418,501	1,068,876
All other.....	32	120			
Other.....	6,187	19,205			

The increase in exports to the United States declared at this consulate during the calendar year 1911 was small but healthy. The 1910 exports showed a large gain over those of 1909, but a large part of this gain was accounted for by heavy shipments of cotton, on account of the shortage in the United States. In 1911 the increase

in the shipments of wool, due to the work of an American house that has its own staff here, made up for the deficiency in cotton. This trade may be counted on to increase. Shipments of hides were about one-half those of 1910, owing to a fear of the possibility of anthrax. Skin shipments showed a slight reduction. The following table shows the values of the principal exports to the United States as invoiced at this consulate during the calendar years 1910 and 1911:

Articles.	1910	1911	Articles.	1910	1911
Asafetida.....	\$390	\$4,922	Wool.....	\$146,129	\$463,592
Carpets.....	754		All other articles.....		2,147
Cotton.....	263,537	11,155			
Hides.....	70,547	35,734	Total.....	2,076,915	2,093,355
Skins:					
Goat.....	1,355,921	1,246,536			
Sheep.....	249,638	329,269			

There were no exports from Karachi to any of the insular possessions of the United States during 1911. Direct cargo for the United States was shipped from Karachi in December, 1911, for the first time since the establishment of this consulate.

Success of American Agents—Trade Prospects.

American traveling men are beginning to come into this district. Two men who have each made two or more trips to Karachi have found the trade profitable. One of these men, handling a line of files, stated that his sales rose from about 1,700 dozen on his first trip to 5,000 dozen on his third trip, showing that American salesmen can sell goods in India if they are willing to work for the trade.

The business prospects for 1912 are not good. This is essentially an agricultural district, depending upon exports of wheat, oilseeds, cotton, and wool for its prosperity. Late crop reports for the whole of the Bombay Presidency indicate that the crop will be about 25 per cent less than that of 1911, and 10 per cent below the average of the past 10 years, while the Punjab shows a decrease of 19 per cent from last year. Both Sind and the Punjab show a decrease in the acreage under wheat. Rape and mustard seed are about 5 per cent less than the average for the past five years. There is a noticeable tendency on the part of cultivators and others to hold wheat for higher prices, which does not seem advisable on account of the bumper crops in Argentina and elsewhere.

Report of Port Trust—Shipping.

The annual report of the Karachi Port Trust for 1911 states that its revenue amounted to \$1,149,614 and its expenditure to \$1,024,194, leaving a surplus of \$125,420, exceeding the best previous record by \$83,123. The number of vessels entering the port during the fiscal year was 3,211, with a tonnage of 1,748,655, of which 898 were steamers, with a tonnage of 1,648,656. The American flag was seen in the harbor once, the first time in six years.

There are now berths for 18 vessels alongside wharves and room for 19 more at moorings in the stream. It seems that the port trust has definitely decided against the use of grain elevators, as it has increased the space available for stacking grain to 300,000 square yards. An application from a local firm for space for the erection of an elevator was refused by the trustees.

NEW ZEALAND TRADE RECORD.

[From Consul General Wm. A. Prickitt, Auckland.]

The appended table shows the trade of New Zealand with the principal countries of the world for the quarters ended March 31, 1911 and 1912. The value of imports in 1912 was the highest on record for the March quarter, being over \$4,500,000 greater than a year ago and nearly \$8,800,000 in advance of 1910. Exports increased by about \$5,000 over the corresponding quarter of 1911, but declined by \$3,000,000 as compared with 1910.

Countries.	Imports.		Exports.	
	1911	1912	1911	1912
United Kingdom.....	\$14,740,560	\$17,658,081	\$34,435,948	\$33,412,310
British possessions.....	4,623,313	4,703,339	3,632,063	3,820,631
Foreign countries:				
United States.....	1,446,783	2,490,327	838,374	1,057,497
Germany.....	529,429	755,103	606,227	976,340
France.....	181,229	176,423	100,855	351,326
Belgium.....	176,238	211,104	124,868	91,042
Balance of Europe.....	306,540	431,816	14,794	16,456
All other.....	271,586	329,775	235,539	267,300
Total.....	22,245,678	26,815,968	39,988,668	39,992,906

The money market is not easy, but as yet there is no pinch. The banks are not extending their loans and are cautioning their customers to be very conservative.

AUTOMOBILE RACE IN SICILY.

[From Consul Hernando de Soto, Palermo.]

The automobile race around Sicily announced in Daily Consular and Trade Reports for May 14, 1912, was won by a 40-horsepower automobile of the Società Ceirano Automobili, Torino, which covered the distance of 1,050 kilometers (652 miles) in 27 hours, 12 minutes, and 43 seconds; a Lancia car was second and a F. I. A. T. third. In all, 26 machines started from Palermo, representing 16 different makes, among which were 3 American cars, Ford, Overland, and Metz. Other well-known makes in the contest were Mercedes, de Dion & Bouton, Isotta, Deutz, Itala, Alfa, and Sigma.

The small 20-horsepower Ford did comparatively well, as it came in sixth, while the Overland, although delayed on account of frequent exchange of tires, was the only car that resisted the jolting over the bad Sicilian roads without a spring being broken or a screw loosened. The high degree of durability shown by the American machines in this race has attracted much attention, which undoubtedly will lead to an increase in the sale of American-made automobiles in Sicily.

The British Capitalists in Canada.

Consul M. J. Hendrick, of Moncton, New Brunswick, advises that the touring British manufacturers and capitalists, announced in Daily Consular and Trade Reports for June 6 as making a close study of the Canadian industrial field, are being entertained by the various boards of trade in the Dominion.

BUSINESS-EFFICIENCY EXHIBITION.

[From Consul General John L. Griffiths, London, England.]

The fifth British Business-Efficiency Exhibition has just been held in London. Among the exhibits were: Adding machines, card systems, check protectors, addressing machines, calculating machines, stamp affixers, typewriters and accessories, carbon papers, filing systems, duplicating machines, loose-leaf and perpetual ledger systems, billing machines, business phonographs, etc.

This exhibition differed in one important particular from many of the trade exhibitions recently held in London, i. e., the marked preponderance of American devices, systems, and office equipments shown. Probably more than one-half of the exhibits were of American manufacture, and the opinion was frequently expressed at the exhibition that the Americans were the pioneers of the improved methods by which the transaction of business is so greatly facilitated.

The introduction in recent years of improved methods for the transaction of business and the adoption of office equipment in the way of filing cabinets, etc., in which correspondence and documents can be placed so as to be readily accessible, have been effected to some extent through attractive advertising, but even to a greater extent through the efforts of traveling representatives and through the publicity gained at business-efficiency exhibitions.

Noteworthy Displays.

Among some of the more notable exhibits, other than American, at the recent exhibition were the following:

(a) *Stamp-affixing machine*.—This is a British invention and of British manufacture. A reel of stamps is placed in the stamp retainer, which is then locked. The machine is placed on the envelope or wrapper. By the single operation of pressing down the lever a stamp is detached, wetted, affixed, and registered. In appearance it is not unlike a numbering or "plunger" dating machine. It is stated that when once the stamps are locked into the machine any attempt at surreptitious abstraction mutilates the stamps, while the automatic registering of the stamps, the number used being always visible on the indicator, is another safeguard. From 4,000 to 5,000 stamps can be affixed per hour. According to information received, this machine is in use in many of the largest business houses, being employed in banks, by manufacturers, railroad companies, etc.

(b) *Loose-leaf ledgers*.—Manufactured by a British firm. It is stated that more than 100,000 are now in use.

(c) *Typewriters*, of British make: (1) With ordinary or foolscap-size carriage, taking paper 9½ inches wide and writing a line 8 inches long. The selling price of this model is £10 (\$48.66). For brief-size carriage, taking paper up to 14½ inches, and having a writing line of 13½ inches, the price is £13 10s. (\$65.70). The weight of this machine is stated to be for the smaller size, 14 pounds, with 84 to 96 characters, hardened steel type, shift keys, line feed, two-color vibrating ribbon, universal keyboard, and four releases. (2) A low-priced typewriter, selling ordinarily at £9 15s. (\$47.45), but during the exhibition at £8 8s. (\$40.87) is, it was stated, a very efficient machine.

(d) *Dispatch carriers*.—These are built on the tricycle system. A large metal box is fitted over the two front wheels, while the driving wheel and seat are at the rear. This invention for the speedy delivery

of goods has become very popular during the past few years, and has superseded the earlier handcar method. Prices range from £14 14s. to £18 18s. (\$71.54 to \$91.97).

(e) *Addressing machine*.—A new model with automatic envelope feed. This machine will address envelopes of various sizes, each with a different address and in facsimile typewriting, at a speed of 7,500 per hour. It is also adaptable for heading and dating statements, rate notices, dividend lists, analysis sheets, annual returns, renewal notices, and receipts.

(f) *Calculating machine*, of British make. This has only recently been placed on the market. Two machines were exhibited, each capable of simultaneous addition and subtraction. These machines are used for the calculation of gross, tare, and net weights. The quantities are expressed in tons, hundredweight, quarters, and pounds. The subtraction of the tare from the gross with the resultant net weight is automatically performed. The three sets of figures are printed side by side so that each weight can be totaled. Interlocking devices secure accuracy. It is stated that practically unlimited speed can be attained. The typing mechanism is at the back. The platen can be brought into sight by depressing a lever.

Excellent American Opportunity.

As there is a steady advance in the adoption of progressive American business methods and systems in the United Kingdom, an excellent opportunity is presented to the American manufacturers for the further introduction of new devices.

It is necessary in most instances, before a new business system can be installed, that its efficiency be demonstrated, as it would only occasionally be purchased as the result of reading an advertisement. It is, therefore desirable, if business on a large scale is contemplated in the United Kingdom, that the American manufacturer, after making a careful preliminary survey, should establish a central office and show rooms in London. Where such a course is not feasible, then it would be well to secure an agent in London, and preferably an agent who does not represent anyone else, so that he may give his whole time and effort to the promotion of the interests of the American manufacturer whom he represents. The London consulate general would be pleased upon application to do everything in its power to place manufacturers in touch with individuals or companies who would be desirous of accepting such agencies.

The British Business-Efficiency Exhibitions, with the exception of that in 1911, have been held for a series of years in London and similar exhibitions are given in the larger cities throughout the United Kingdom. Each of these exhibitions affords the American manufacturer an excellent opportunity of bringing his business devices and equipments to the direct notice of English business men.

WEATHER VANE CATALOGUES WANTED.

The Weather Bureau, Department of Agriculture, Washington, D. C., is desirous of securing for its library as complete a collection as possible of the illustrated catalogues of American firms manufacturing or dealing in ornamental wind vanes and weathercocks. Catalogues of scientific instrument makers are not desired in this connection as the bureau is already supplied with these.

BIG RAILWAY EQUIPMENT ORDERS.

[Canadian press reports from Ottawa.]

Vast Expenditures in Canada.

Reports made to the Board of Railway Commissioners of Canada by the Canadian Pacific, Grand Trunk, Canadian Northern, and Great Northern Railways of new equipment under construction disclose a huge equipment program. The figures given do not include equipment for which appropriations have been made but not ordered because of difficulty in finding manufacturers, Canadian or American, to undertake construction of new equipment in the near future. All the roads reporting state through their officials that they are in the market for much more equipment than that included in the figures here given, but that the Canadian shops are away behind in filling their orders, which far exceed their capacity, and that similar conditions obtain among the United States manufacturers.

Manufacturers Can Not Fill the Orders.

"We have appropriated \$19,000,000 for new equipment, but can not find manufacturers who will take our money," is the manner in which General Manager Leonard, of the Canadian Pacific Railway, puts it. The Canadian Pacific reports that it has the following under construction now, 11,593 box cars, of which 7,080 are being built at its own shops in Montreal, 2,000 at Hammond, Ind., 2,000 at Hegewisch, Ill., 513 at Detroit, and that all are to be delivered between now and October. It has under construction 665 stock cars, of which it is building 465 in Montreal, and 200 have been ordered from Halifax; 244 refrigerator cars, being built at Montreal; 411 coal cars at Montreal; 616 ballast cars at Montreal; 42 tank cars, being built at Detroit, and 158 caboose cars, being built at Montreal. It also has under construction 52 passenger locomotives, 120 freight locomotives, and 35 switch locomotives at Montreal.

The Grand Trunk reported that it has under construction 2,000 box cars by the Canada Car & Foundry Co. at Montreal; 250 refrigerator cars at Amherst, Nova Scotia; 1,000 box cars by Western Steel Car & Foundry Co. at Hegewisch, Ill.; 1,000 coal cars by the Pressed Steel Car Co. at McKees Rocks, Pa.; 250 automobile cars by the Western Steel Car & Foundry Co.; 250 automobile cars by the American Car & Foundry Co. at Detroit; and 250 refrigerator cars by the same company at its Chicago works, besides 10 passenger locomotives at its Montreal shops.

The Great Northern Railway Co. reports that it has under construction 25 locomotives at the Baldwin Locomotive Works, and 1,500 box, 250 refrigerator, and 1,000 ore cars under construction by the Haskell & Barker Car Co. The Canadian Northern reports it has under construction 1,911 box cars and 132 flat cars, and 61 locomotives are being built in Canadian shops. This road also reports a large number of new roundhouses and other improvements in the West now under construction.

Reports have not been received from the numerous smaller roads, but it is estimated that as much more equipment has been ordered by them. Most of this new equipment is intended for use in coping with the great freight congestion expected to reappear again after the harvesting of this year's crop in the West. Traffic experts, the members of the grain commission, and other Government officials see little hope of avoiding another great grain blockade this year. The National Transcontinental will not be connected up with the Grand Trunk Pacific this year, and in consequence there will be, as formerly, only the Canadian Pacific "spout" through which to empty the great granary of the West to the east of Fort William after the close of navigation.

JAPANESE SHIPPING AND AUSTRALIAN TRADE.

[From Consul General John P. Bray, Sydney.]

Recently shipments of merchandise from Sydney to San Francisco have been made in the steamers of the Nippon Yusen Kaisha via Yokohama, with transshipment at that port to trans-Pacific connecting Japanese vessels. This is a significant indication of the vigor with which the Japanese are pushing their merchant shipping enterprise in the Pacific. From inquiries made of the shippers directly concerned it has been learned that a saving in freight of approximately \$5 per ton has been effected by taking advantage of the Japanese service, although there are direct steamers leaving Sydney for San Francisco at stated intervals.

GERMAN MUNICIPAL NOTES.

[From Deputy Consul General Simon W. Hanauer, Frankfort on the Main.]

A new bridge over the River Main is to be built by the city of Frankfort at an estimated cost of over \$1,000,000.

City employees.—On the city's pay roll are 9,888 persons, including 3,104 officials and teachers, 6,594 employees and laborers, and 109 ~~men~~ of the fire department.

School attendance.—Frankfort has 92 public schools, where last year 54,300 children were instructed by 1,454 teachers. The private schools were attended by 3,801 scholars.

Market hall.—Frankfort is planning to erect a new market hall, to cost over \$700,000. A committee of councilmen is visiting other large cities to inspect similar halls of the best type.

At the municipal slaughterhouse in Frankfort 261,698 animals were killed last year, these including 1,381 horses, 26,666 sheep and goats, 126,567 swine; the balance consisted of calves, cows, and oxen.

The police department of Frankfort is a State institution under the control of the Prussian civil governor. It is composed of 105 bureau officials, clerks and messengers, 38 captains and officers, 66 detectives, and 638 sergeants and patrolmen.

Statistics.—The city waterworks last year supplied 24,000,000 cubic meters of water (a cubic meter is equal to 264.17 gallons). The city electrical works furnished 41,000,000 kilowatt-hours. The electric tramway lines, owned and operated by the city, carried 93,500,000 passengers.

Consumers' Cooperative Society.—The Frankfort Konsum-Verein (cooperative association) has been in existence 11 years. The following table comparing the association's transactions during its first and its most recent fiscal years will show the development of the organization:

Transactions and membership.	First year.	Last year.
Total sales of merchandise.....	\$50,336	\$1,603,132
Reserve fund.....	257	43,924
Savings fund.....	4,003	259,048
Written off for losses, etc.....	151	14,115
Number of members.....	2,046	20,449

The association employs 340 persons in its 52 stores or distributing places, bakery, coffee-roasting and mineral-water bottling establishments.

Roumanian Locomotive Contracts.

American Minister John B. Jackson reports from Bucharest that he understands that the contract to furnish the Roumanian Government with 20 express locomotives has been given to the Maffei Works at Munich, Germany, at a price of \$25,862 each, and that at least a part of the contract for the 32 freight locomotives (mentioned in Daily Consular and Trade Reports for May 21, 1912) is to go to the Grafenstaden Works at Strassburg, Germany. Austrian, Belgian, English, French, German, Hungarian, Italian, and Russian firms took part in the competition.

URUGUAYAN COMMERCIAL NOTES.

[From American Minister N. A. Grevstad, Montevideo.]

Successful Year of Montevideo's Waterworks.

The report for the fiscal year 1911 of the Montevideo Waterworks Co., submitted at the thirty-third annual meeting of the shareholders held in London March 21, shows the excellent condition of this company and presents a fine example of a well-managed English concern. The following data were taken from the published report:

A larger gain in the number of additional services was made in 1911 than in any previous year of the company's existence. At the close of 1907 the total number of services was 15,670, in 1908 it rose to 16,839, in 1909 to 18,841, in 1910 to 21,763, and in 1911 to 24,890.

The paid-up capital of the company now totals \$4,250,000, a \$500,000 increase thereto having been effected during the year through a new issue of shares, at a premium of \$125 per share. The premium has been added to the reserve fund, raising it from \$550,000 to \$675,000. An additional \$50,000 is to be apportioned to the reserve fund from the profit and loss account. There is, besides, a social reserve fund of \$125,000, which may be drawn upon for the equalization of dividends in case of need.

From the depreciation fund, which at the close of the preceding year stood at \$222,620, was written off the sum of \$27,220 in reduction of the book cost of meters and materials; but at the same time there is to be added \$50,000 out of the year's profits, so that the depreciation fund carried forward will show a net increase of some \$23,000.

Expenditures made on capital account in the course of the year reached \$340,560: Extension of the city mains, \$83,600; new filters, \$25,490; new engine, \$60,000; new buildings or additions, \$3,885; new gravitation main, \$167,585. All this expenditure was the direct outcome of the rapid development of the company's business.

Gross receipts in the fiscal year 1911 amounted to \$791,625, being an increase of 4.33 per cent over the preceding year, while expenses, on the other hand, totaled \$254,805, or an advance of 12 per cent. The income was adversely affected by the prevalence of rain (and the consequent copious supply of water in private cisterns) and by the lower rates for the municipal service.

After bringing in the balance from the preceding year, \$186,135, and after payment of debenture interest and the interim dividend of 3 per cent, there is a balance available of \$501,385, which it was recommended be appropriated as follows: In payment of a final dividend of 5 per cent (making a total dividend for the year of 8 per cent, at which rate it has been maintained for the last three years), free of income tax, \$187,500; to depreciation fund, \$50,000; to reserve fund, \$50,000; balance to be carried forward, \$213,885.

[From Consul Frederic W. Goding, Montevideo.]

Exports of Hides and Skins.

During 1911 there were shipped from Uruguay to foreign countries 839,729 cattle hides and 253,959 calfskins. The approximate weight of these was 20,042,528 pounds and the value about \$4,427,395. The destinations of the shipments show the United States to be the chief purchaser, with more than 30 per cent of the total export of both articles, Spain, Italy, and Austria following. Portugal, however, was the leading market for the calfskins.

New Sugar Refinery.

In this Republic there are two sugar refineries in operation, one of which imports crude sugar, the other obtaining its supply from beets grown in the vicinity. A project for a third, which has been introduced by the Executive for consideration by the Chamber of Representatives, grants to Diaz Aznares & Co. the right to expropriate about 25,000 acres of land for a factory with a capacity of 660 tons per day and for planting beets, the capital of the company to be

\$827,200. The work must be completed within two years after the date of the concession. The enterprise is to be free from taxation for 10 years.

Wool Shipments.

From October 1, 1910, to September 30, 1911, Uruguay's shipments of bales of wool were as follows:

Year.	United States.	Austria.	England.	France.	Germany.	Netherlands.	Italy.	Total.
1911.....	718	2,853	4,975	38,492	38,807	21,711	3,994	111,550
1910.....	7,821	1,364	2,843	44,009	17,078	23,705	4,302	101,122

At an average price of \$342 per bale the value of the 1911 wool exports reached the sum of \$38,150,100. [The wool clip of Uruguay was reviewed in Daily Consular and Trade Reports on May 6, 1912.]

TRINIDAD NOTES.

[From Consul Franklin D. Hale, Port of Spain, June 10.]

Relief from drought.—The force of the most serious drought known in Trinidad for 50 years has been broken by copious showers in nearly all sections of the island. The water supply for daily use is now ample, but a very great rainfall is necessary soon to insure satisfactory crop conditions for next year. The prospect for newly planted cane is not good and the supply of seedlings is not equal to the demand.

Cocoa shortage.—Very little cocoa remains in store after recent shipments, and because of the long-continued drought there will be little more to export before very late in the year. The usual June pickings will amount to almost nothing, and the quantity of the crop to be gathered later will depend largely upon the rain conditions, although thousands of trees have been partially or entirely destroyed by fire.

Hotel improvements.—The unusually large tourist business during the past season has proved so profitable as to lead to greater expectations in the future, and the managers of Queens Park Hotel, in Port of Spain, are planning extensive improvements—increasing the number of rooms, building suites, and enlarging the dining rooms to accommodate 350 guests. The furniture for the suites will be imported from New York.

Venezuelan cattle for Trinidad.—Trinidad finds its principal supply of fresh beef in the Venezuelan cattle imported from the Orinoco districts about Bolivar. The unusual dry season that has prevailed all over this part of the world for months has been disastrous to the raising of cattle, which have in great numbers died for lack of water and grass on the inland plains. For some weeks the supply for the Trinidad market has been small, and consequently the price of beef has been almost prohibitively high. To remedy the serious condition the Compañía de Navegación Fluvial y Costanero de Venezuela is putting into service a special line of steamers from Bolivar up the Orinoco to San Fernando de Apure, to bring cattle from the more inland districts where the drought has not been so great.

FOREIGN PAPERS FOR ADVERTISING AMERICAN GOODS.

No attempt has been made in the series of reports entitled "Foreign papers for advertising American goods" to publish complete schedules of advertising rates, which, for most papers, vary according to the amount of space, length of contract, and position. One rate is quoted to give advertisers a general idea of the cost of advertising. Unless otherwise stated, the rates in the following reports are given in United States currency:

MEXICO.**ACAPULCO.**

[By Consul Clement S. Edwards.]

There are no news or trade papers published in the State of Guerrero, the only publication being the *Periodico Oficial*, a small quarto published weekly at Chilpancingo, the capital, and containing only laws, decrees, and court judgments. *El Heraldo* (Spanish and English), *El Imparcial* (Spanish), and *El Diario* (Spanish), published in Mexico City (see report for the consular district of Mexico), are in general circulation in this region and are the best mediums for advertising purposes. *El Heraldo* appears to be the most popular, having the widest circulation here. All of these papers are devoted to news and advertising and bear evidence of considerable enterprise.

Citrate of lime, coffee, fruits, hides and skins, oil cake and meal, and rubber are exported from this district to the United States. Machinery, mineral and vegetable substances, arms and explosives, and chemicals are imported therefrom.

AGUASCALIENTES.

[By Vice Consul H. G. Bretherton.]

The imports of agricultural implements from the United States to this district are increasing. Other imports from the United States include shoes, pumps and windmills, pipes, building supplies, furniture, electric supplies, cooking utensils, and groceries. The principal exports to the United States are copper, lead, and silver bullion, beans, hides and skins, household effects, and drawn work. Following are the leading papers:

Revista del Centro (Spanish), Aguascalientes. Weekly newspaper. Advertising rates, 15 cents per inch per insertion. Annual subscription price, 80 cents. Circulation, 1,800.

El Debate (Spanish), Aguascalientes. Weekly newspaper. Advertising rate, 15 cents per inch per insertion. Annual subscription price, 80 cents. Circulation, 1,500.

El Clarin (Spanish), Aguascalientes. Weekly newspaper. Advertising rate, 7 cents per inch per insertion. Annual subscription price, 80 cents. Circulation, 500.

El Diario (Spanish), Zacatecas. Daily newspaper. Annual subscription price, \$6.

CHIHUAHUA.

[By Consul Marion Letcher.]

American machinery, hardware, furniture, shoes, hats, and clothing are sold in the district. The principal exports to the United States are silver, gold, and lead bullion; gold, silver, lead, and zinc concentrates; lumber, hides, cattle, and ores. The two leading papers are reported below:

Enterprise (English), Chihuahua. Weekly newspaper. Advertising rate, 30 cents per inch per insertion. Annual subscription price, \$2. Circulation, 1,000.

El Monitor (Spanish). Chihuahua. Daily newspaper. Advertising rates, 75 cents per inch per month. Annual subscription price, \$3. Circulation, 4,000, throughout Chihuahua and adjoining States. Has under consideration the printing of an English section, which would result in doubling the present size of the paper. Correspondence may be conducted in English.

CIUDAD JUAREZ.

[By Consul Thomas D. Edwards.]

The total value of imports from the United States at the port of Ciudad Juarez during 1910 was \$8,210,208, an increase of \$2,377,928 compared with 1909. The principal exports to the United States are bullion, hides and skins, live stock, and ores. There are only two small publications issued in the district.

El Progreso (English). Colonia Dublan. Weekly newspaper. Advertising rates are reasonable. Annual subscription price, \$1.50. Circulation, 800, principally among the farmers and stock raisers.

Revista Internacional (Spanish). Ciudad Juarez. Weekly newspaper. Advertising rates are reasonable. Annual subscription price, \$1.50. Circulation, 600, among officials and business men.

CIUDAD PORFIRIO DIAZ.

[By Consul Luther T. Ellsworth.]

Merchandise to the value of \$4,910,079 was furnished this consular district during 1910 by the United States, consisting principally of agricultural implements, corn, carriages, railway cars and coaches, drugs and chemicals, explosives, fruits, hats, iron and steel, boots and shoes, metal goods, oils, provisions, seeds and grains, and lumber. The exports are animals, calamine, coffee, hides and skins, ixtle, pecan nuts, and rubber. The two leading papers are reported below:

El Pueblo Libre (Spanish). Ciudad Porfirio Diaz. Weekly newspaper representing all lines of trades. Advertising rate, \$2 per column (column 13 inches). Annual subscription price, \$1. Circulation, about 800.

El Internacional (Spanish). Ciudad Porfirio Diaz. Weekly newspaper representing all lines of trades. Advertising rates, \$2.50 per column (column 18 inches). Annual subscription price, \$2. Circulation, about 1,000.

DURANGO.

[By Consul Charles M. Freeman.]

Mining and agriculture are the principal industries of this district. There are also rubber, cotton, wool, and soap factories, iron and steel works, and ore smelters. No trade journals are published. There are several weekly and triweekly newspapers printed, but it is believed that no paper issued in this district could be used advantageously for advertising the various products of the United States unless the products were on sale by some local firm. Exporters of American-made goods, unless, as stated above, the goods are already on sale locally, desiring to advertise in Mexico would undoubtedly obtain better results by using papers published in Mexico City, as they cover the ground more thoroughly and are read by the people who would be interested in the purchase of American goods. Two of the local papers are reported below:

El Heraldo (Spanish). Durango. Newspaper issued four times a week. Advertising rate, 50 cents per inch per month, a reduction being made for larger space or longer time. Annual subscription price, \$4.50. Circulation, about 3,000.

La Evolucion (Spanish). Durango. Newspaper issued four times a week. Advertising rate, 50 cents per inch per month, a reduction being made for larger space or longer time. Annual subscription price, \$4.50. Circulation, about 3,000.

FRONTERA.

[By Consul A. J. Lespinasse.]

Agricultural implements, boots and shoes, drugs and chemicals, iron and steel manufactures, lumber, and provisions are imported from the United States, and bananas, coffee, hides, and skins, rubber, and woods, are exported thereto. The leading papers published in the district are given below:

El Correo de Tabasco (Spanish), San Juan Bautista. Daily newspaper of two sheets, one sheet devoted to general and local news and the other to advertisements. Advertising rate, \$3.75 per one-eighth page per month. (type page 13 by 18 inches). Annual subscription price, \$6. Circulation, 1,500, reaching business houses, planters, and all classes generally.

El Progreso (Spanish), San Juan Bautista. Weekly bulletin issued by the National Board of Agriculture of Tabasco, devoted to the agricultural interests of the State. Advertising rate, \$1.50 per one-eighth page per month (type page 7 by 10½ inches). Annual subscription price, \$3. Circulation 700, reaching planters, farmers, and business firms.

GUADALAJARA.

[By Consul Samuel E. Magill.]

No trade papers are published in the district. The leading newspapers are given below. It would be advisable for American business men to make arrangements for advertising through some agency or local firm which could attend to the details. The clerk of the consulate, Mr. Raymond A. Merrill, will gladly arrange contracts for American advertisers without charge.

La Gaceta (Spanish), Guadalajara. Daily and weekly newspaper. Advertising rates, daily, 35 cents per inch per insertion, second and third pages; weekly, 50 cents per inch per insertion. Annual subscription price, daily, \$3; weekly, \$2. Circulation daily, 15,000; weekly, 18,000.

El Regional (Spanish), Guadalajara. Daily newspaper. Advertising rate, 25 cents per inch per insertion. Annual subscription price, \$3.60. Circulation, 6,000.

Guadalajara Times (English), Guadalajara. Weekly newspaper, circulating principally among Americans and containing many advertisements. Advertising rate, 50 cents per inch per insertion. Annual subscription price, \$1. Circulation, 1,200.

HERMOSILLO.

[By Consul Louis Hostetter.]

The total value of imports into Hermosillo during 1910 was \$2,752,678, of which the United States furnished \$1,014,389, consisting principally of agricultural implements, cotton goods, furniture, groceries, hardware, clothing, and boots and shoes. Gold and silver bullion, chick-peas, dried peas, and hides and skins are the leading exports to the United States. No trade papers are published in the district.

El Correo de Sonora (Spanish), Guaymas. Daily newspaper. Advertising rates, about \$21.50 per inch per year, daily insertions. Annual subscription price, \$6. Circulation, 800.

La Era Nueva (Spanish), Hermosillo. Weekly newspaper. Advertising rates, about \$13.90 per inch per year, weekly insertions. Annual subscription price, \$3. Circulation, 1,200.

MATAMOROS.

[By Consul Jesse H. Johnson.]

The import and export trade of the consular district of Matamoros materially increased during 1910 compared with previous years. Practically all the exports from the district went to the United States, and of the total imports, valued at \$169,069, the United

States furnished \$161,500 worth. Two newspapers are published in the district, representing the various lines of trade.

El Sol de Mayo (Spanish), Matamoros. Issued three times a week. Advertising rates, \$1.50 per insertion for a space 5 inches square. Annual subscription price, \$2.50. Circulation, about 600.

El Matamorense (Spanish), Matamoros. Weekly. Advertising rates, \$1.50 per insertion for a space 5 inches square. Annual subscription price, \$1.25. Circulation, about 500.

MAZATLAN.

[By Consul William E. Alger.]

Of the total value of imports into the port of Mazatlan during 1910, amounting to \$1,651,143, the United States furnished goods valued at \$786,714, consisting principally of animal, mineral, and vegetable products, textiles, machinery, and explosives. The value of articles invoiced through the American consulate at Mazatlan for the United States during 1910 was \$3,744,398, a gain of \$226,113 compared with the previous year; bullion, concentrates, ores, hides, rubber, and provisions being the principal exports. There is but one paper published in the district, and that reaches the whole reading public.

El Correo de la Tarde (Spanish), Mazatlan. Daily newspaper. Foreign annual subscription price, \$7.50. Circulation, 7,500, and is rapidly increasing.

MEXICO CITY.

[By Consul General Arnold Shanklin.]

Mexico City is the richest commercial center in the country, and the manufacturing industries are extensive, among the more important being distilleries, breweries, foundries, paper mills, textile works, and tobacco factories.

There are about 50 papers and magazines, severally devoted to news, trade, society, science, education, politics, humor, etc., published in the Federal District of Mexico, but by far the greater majority of them are unimportant, and have a very limited circulation. In fact there are very few papers published here which it is believed would be of any value to American manufacturers for use as advertising mediums. Those which could be used advantageously are treated below:

Mexican Herald (English), Mexico City. Daily morning newspaper (only English newspaper in Mexico City), modeled on the lines of the United States papers, carrying Associated Press news, and circulating generally among the English-speaking population of the city and vicinity. Contains considerable advertising, chiefly in the machinery and dry goods lines. Advertising rates, 3 cents per agate line per insertion. Annual subscription price, \$7. Circulation, 10,000.

El Imparcial (Spanish), Mexico City. Daily morning newspaper of general circulation throughout the Republic, carrying Associated Press dispatches as well as maintaining its own news service in Mexico. Advertising rates, \$1.40 per inch per insertion. Annual subscription price, \$6. Circulation, 90,000, divided about equally between Mexico City and the remainder of the Republic.

El Diario (Spanish), Mexico City. Daily morning newspaper, maintaining its own correspondents in the principal cities of North and South America and Europe. Advertising rates, 84 cents per inch per insertion. Annual subscription price, \$6. Circulation, 48,000, 30 per cent distributed in Mexico City.

El Heraldo Mexicano (Spanish), Mexico City. Daily newspaper, same publishers as Mexican Herald. Advertising rates, 3 cents per agate line per insertion. Annual subscription price, \$3. Circulation, 30,000, about 50 per cent distributed outside the City of Mexico.

Mexican Financier (English), Mexico City. Weekly financial journal, devoted to the commercial and banking interests of Mexico, and is read generally by the banking, mining, and general financial interests of the country. Advertising rates, \$5 per inch per insertion. Annual subscription price, \$5. Circulation, 3,000.

Mexico Mining Journal (English and Spanish), Mexico City. Monthly journal dealing with mining in its various phases and circulates largely among the mining

interests in Mexico. Advertising rates, \$2.50 per inch per insertion. Annual subscription price, \$1.50. Circulation, 5,000.

El Hacendado Mexicano (Spanish), Mexico City. Monthly journal, devoted to agriculture and sugar manufacture in Mexico. Advertising rates, \$32.50 per page for three months (type page 8 by 11 inches). Annual subscription price, \$4. Circulation, 1,800, 1,000 in Mexico and the balance in Central and South America and the West Indies.

MONTEREY.

[By Deputy Consul John C. Allen.]

The leading exports from this district to the United States are argentiferous lead, lead and silver bars, calamine, goatskins, guayule rubber, hair, hides, and pecan nuts. There are no trade papers or magazines published in this consular district. The leading newspapers are reported below:

Monterey News (English and Spanish editions), Monterey. Daily newspaper. Advertising rates, 25 cents per inch per insertion for 500 inches or more display space to be used within one year. Combined rates for both editions, about 10 per cent discount. Annual subscription price, each edition, \$5. Circulation, Spanish edition, 6,500; English edition, 3,500.

El Noticiero (Spanish), Monterey. Daily newspaper. Advertising rates, \$10 per page per insertion (type page 10½ by 14 inches). Annual subscription price, \$3. Circulation, 4,500.

La Prensa (Spanish), Monterey. Daily newspaper. Advertising rates, \$2.50 per inch per month, second or third page. Annual subscription price, \$5. Circulation, 6,000.

El Trueno (Spanish), Monterey. Weekly newspaper. Advertising rates, 25 cents per inch per insertion. Annual subscription price, \$1. Circulation, 3,640.

Telephone Directory (Spanish), Monterey. Issued four times a year. Monterey and Saltillo editions. Advertising rates, Monterey edition, \$10 per page per insertion (type page 5 by 8 inches); Saltillo edition, \$5 per page per insertion (type page 4½ by 7½ inches); space in both editions, 8 per cent discount. Annual subscription price, \$1. Circulation, Monterey edition, 1,549; Saltillo edition, 639.

NOGALES.

[By Consul Alexander V. Dye.]

Mining is the principal industry of the consular district of Nogales, especially copper mining. There are three important frontier ports, namely, Nogales, Naco, and Agua Prieta. The principal imports from the United States are mining machinery, crude oil, dynamite, lard compound, and bituminous coal, and the exports consist of bullion, concentrates and ores, cattle, and hides. Below are given the leading papers published in the district:

Sonora News (English), Cananea. Weekly newspaper. Advertising rates, 25 cents per inch per insertion. Annual subscription price, \$3.75. Circulation, 950, principally among American business and mining men.

La Verdad (Spanish), Cananea. Daily newspaper. Advertising rates, \$1 per inch per insertion, second page. Annual subscription price, \$4. Circulation, 1,500, principally among the Mexican laboring classes of Cananea.

PROGRESO.

[By Consul G. B. McGoogan.]

The principal crop of the State of Yucatan, which includes the consular district of Progreso, is sisal fiber. The leading exports from this district are sisal, chicle, hides and skins, and mahogany. The papers named in the list below are the best advertising mediums in the district:

La Revista de Merida (Spanish), Merida. Daily newspaper. Advertising rates, 15 cents per inch per insertion. Annual subscription price, \$6. Circulation, 6,000.

Diario Yucateco (Spanish), Merida. Daily newspaper. Advertising rates, 13 cents per inch per insertion. Annual subscription price, \$6. Circulation, 6,000.

SAN LUIS POTOSI.

[By Consul Wilbert L. Bonney.]

The population of the State of San Luis Potosi in 1910 was officially reported as 624,748, compared with 575,432 in 1900. The capital is the largest city in the State, and has a population of 82,946, according to the recent census. The principal imports throughout the district are machinery, vehicles, hardware, arms, cotton, silk, woolen goods, gold work, furniture, chemicals, paper, glassware, jewelry, shoes and haberdashery, groceries and food stuffs, electrical and optical goods. The value of the articles invoiced through the American consulate at San Luis Potosi to the United States during 1910 was \$4,395,383, an increase of \$987,430 compared with 1909, and consisted principally of beans, bullion, ores, chili, ixtle fiber, hides and skins, pecan nuts, and rubber.

There are no trade papers published in this consular district. The only newspaper of commercial importance is *El Estandarte*. The circulation of this paper is almost entirely local, and it reaches the majority of the reading people of this capital. There are two country papers in outside towns, but their circulation is small, and they are not commercially important. In addition, there are about 3,500 copies of Mexico City papers, mostly in Spanish, sold at the station and on the streets each morning, and this trade is increasing. The most popular Mexico City papers are *El Pais*, *El Imparcial*, *El Heraldo*, and the Mexican Herald.

Many small papers have recently sprung up in San Luis Potosi, which are yet of little importance. One or more of them may prove permanent, as there is room for another local paper. The habit of reading newspapers is growing rapidly, and the study of the English language is daily becoming more popular, two facts which have a bearing upon advertising.

Methods Employed—Absence of Street Signs.

In the absence of any general medium the question of how to reach the consumer by advertising is a puzzling one, and at the same time it is one of the most important that could be raised, and is worthy of the study of expert advertising men. The patent-medicine manufacturers have solved it to an extent adequate for their purposes, and their views on the subject would be most valuable. They use all means—newspapers, posters, circulars, and samples—and some of their goods are almost as well known here as at home.

Street signs in this district are usually painted on the business houses, and as the streets generally are narrow these signs are difficult to read in passing, and at night they are entirely useless. An overhanging electric sign placed by an American sign company has added to the appearance of the principal street, and created favorable comment. Some large concerns of this city bear no sign or advertising matter to indicate their name or the character of business engaged in, and as the goods can not be well displayed, it is often a matter of some difficulty to determine the line of goods kept in such stores. There are other concerns which use modern methods, excepting that they hesitate to publish their prices. Those engaged in the jobbing trade do not use newspaper advertising, but they have special knowledge of their field and can circularize effectively. Their failure to use

the local paper is not conclusive against its value for advertising foreign goods.

One newspaper with a circulation of 3,000 in a city of 83,000 indicates the advertising situation here. There is little local advertising in this paper. Local merchants have not learned its importance, and competition is not of the open and aggressive kind which prevails in the United States.

Goods Which Could Well Be Advertised.

With but one local paper the problem for the advertiser is simplified. This paper is read by nearly all native people of the middle and upper classes, and it is bound to grow in importance with increasing freedom of discussion and interest in public matters. An advertisement in this paper could hardly escape attention; it need not be large. Newspaper advertising is still somewhat of a novelty. The editors do not subordinate reading matter to their advertising. I am convinced that a card in the local paper would result in more inquiries than the same amount of money spent in circulars and posters, if the article advertised is of general appeal. Local advertising is especially good for single standardized articles, which do not require extended negotiations in the buying, such, for example, as tools, hand presses, kitchen devices, shoes, and novelties. A cut should show the article, if practicable, with price. Circulars and catalogues are plentiful here, but when an article is advertised in the local paper it has a guaranty which circulars and catalogues do not carry, and familiarity with an advertisement is in a measure like acquaintance with the goods.

If the market here at first is limited, on the other hand, advertising is not expensive. The first inquiries would naturally be from those who have an actual need of the article advertised. But with one order a sample is furnished to a small circle, knowledge of the goods spreads, and later orders will come from those whose needs have been created by the advertisement, and, finally, the article comes to be a necessity in the trade. So many of the middle class are learning English that the method of printing an advertisement in both languages might be tried. Real ingenuity will be appreciated if it keeps within the bounds of good taste. A striking advertisement here would attract more attention than in American cities.

The concession for placing advertising in more than 900 railway stations in Mexico is held by the General Advertising Co. of Mexico (Ltd.), Apdo. Postal 72, Mexico City.

El Estandarte (Spanish), San Luis Potosi. Daily, except Sunday. Advertising rates furnished on application. Annual subscription price, \$9. Circulation, about 3,000.

TAMPICO.

[By Consul Clarence A. Miller.]

The port of Tampico, which is said to be superior to all others on the Gulf coast, has excellent steamship service with ports of the United States, the total number of vessels entering Tampico engaged in international commerce during the fiscal year ended June 30, 1910, being 396; 173 vessels left United States' ports for Tampico during the fiscal year ended June 30, 1911. The value of articles exported from this consular district to the United States during the calendar year 1910, according to consular invoices, was \$829,725, against \$335,644 in 1909, consisting principally of calamine, chicle,

ixtle fiber, hides and skins, rubber, and sarsaparilla. The leading papers published in the district are listed below:

Tampico Record (English), Tampico. Weekly newspaper. Advertising rates, 13 cents per inch per insertion. Annual subscription price, \$1. Circulation, 500 to 1,000.

Tampico Times (English), Tampico. Weekly newspaper. Advertising rates, 13 cents per inch per insertion. Annual subscription price, \$1. Circulation, 500 to 1,000.

TAPACHULA.

[By Consul Albert W. Brickwood, Jr.]

According to the census for 1910, the State of Chiapas has a population of 436,817. The present is an opportune time for American exporters to place their wares in Chiapas. The first-class goods sold elsewhere can be sold here. Household furniture and draperies, rugs, wool, paper, ranges, hardware, refrigerators, crockery, cutlery, telephones and electric appliances, electric signs, hand fire extinguishers, toilet articles, dry and fancy goods, agricultural implements, durable long knives, or machetes, would find a good market. There is also an opportunity to sell vehicles, harness and saddlery, asbestos roofing, paints, cement, iron balconies, dairy appliances, drugs, and vegetable and flower seeds. The principal exports are coffee and rubber. No trade papers are published in the district; and the leading newspapers are reported below. The advertising rates of all these papers are reasonable, but their circulation is not very large. Some of the hardware stores and business houses advertise in these publications.

El Sur de Mexico (Spanish), Tapachula. Weekly newspaper. Annual subscription price, \$3.

El Progreso (Spanish), Tapachula. Weekly newspaper. Annual subscription price, \$3.

El Herald de Chiapas (Spanish), Tuxtla Gutierrez. Weekly newspaper. Annual subscription price, \$1.75.

VERACRUZ.

[By Consul William W. Canada.]

Veracruz is the largest city in the consular district of Veracruz, but Orizaba, Jalapa, Cordoba, Huatusco, Coatepec, Tuxpam, Papantla, and San Andres Tuxtla are also towns of some importance. The value of imports from the United States through the port of Veracruz during 1910 was \$9,608,420, and the value of exports thereto was \$4,484,684. Two newspapers are published in the district, but for the purposes of advertising the various lines of American products, with a view to bringing these goods to the attention of possible buyers, they are deemed of little importance. All first-class daily and weekly papers issued in Mexico City circulate here, the morning papers arriving in Veracruz on the evening of the same day. No trade journals are published in the district.

La Opinion (Spanish), Veracruz. Daily newspaper. Advertising rates, about 13 cents per inch per insertion. Annual subscription price, \$6. Circulation, 10,000.

El Dictamen (Spanish), Veracruz. Daily newspaper. Advertising rates, 13 cents per inch per insertion. Annual subscription price, \$6. Circulation, about 5,000.

BRITISH HONDURAS.

[By Consul William L. Avery, Belize.]

The consular district of Belize comprises the entire colony of British Honduras. Bananas, chicle gum, coconuts, rubber, and wood are the principal exports to the United States, and flour, provisions,

iron and steel manufactures, boots and shoes, clothing, oils, and drugs and chemicals are imported therefrom. There are only three papers published in the colony, one of which is the official journal of the Government, issued weekly, and containing only legal and official notices.

Clarion (English). Belize. Weekly newspaper established 1897. Best advertising medium in British Honduras. This paper has a 7 by 10 inch type page and each number contains 36 pages. Advertising rates, 10 cents per inch per insertion. Annual subscription price, \$4. Circulation, domestic, 500; foreign, 200.

Colonial Guardian (English), Belize. Weekly newspaper established 1882. Patent medicines and local enterprises are its principal advertisements. Advertising rates, 10 cents per inch per insertion. Annual subscription price, \$4. Circulation, domestic, 190; foreign, 60.

COSTA RICA.

PORT LIMON.

[By Consul Chester Donaldson.]

The exports from this district to the United States consist principally of bananas, gold and silver bullion, cocoa, coffee, hides, and rubber. Cotton goods, gold currency, flour, railway materials, machinery, coal, electrical supplies, drugs, lard, lumber, and leather are imported from the United States. The following are the leading papers published in this district:

El Tiempo (English and Spanish), Port Limon. Daily newspaper. Advertising rates, 10 cents per inch per insertion. Annual subscription price, \$4.65. Circulation, 4,000.

El Herald de Atlantico (Spanish), Port Limon. Weekly newspaper. Advertising rates, 8 cents per inch per month. Annual subscription price, \$2.33. Circulation, about 2,000.

SAN JOSE.

[By Consul Samuel T. Lee.]

Bananas, coffee, gold and silver bullion, hides, rubber, cocoa, and timber are exported to the United States. Cotton goods, flour, iron and steel manufactures, railroad material, lard, lumber, coal, drugs, leather, and canned goods are imported therefrom. There are no trade papers published in the district. The leading newspapers are reported below:

La Información (Spanish), San Jose. Daily newspaper, reaching all classes of readers throughout the Republic. Advertising rates, 25 cents per inch per insertion. Annual subscription price, \$5.58. Circulation, 6,000.

El Noticiero (Spanish), San Jose. Daily newspaper, reaching all classes of readers throughout the Republic. Advertising rates, 4 cents per inch per insertion first page. Annual subscription price, \$4.65. Circulation, 3,500.

The following paper is added by the Bureau of Manufactures:

Revista Economica (Spanish, English, French, and German), San Jose. Monthly bulletin of finance, political economy, commerce, agriculture, industry, mining, customs duties, and statistics. Annual subscription price, \$2.50.

HONDURAS.

CEIBA.

[By Consul Allen Gard.]

Honduras is the most sparsely settled country in Central America. Agriculture and grazing are the leading industries and bananas the principal product. The forests abound in valuable woods, medicinal herbs, gums, and fiber plants. It is one of the richest countries in Central America in mineral resources, but on account of lack of

transportation these are not fully developed. Exports consist chiefly of bananas, silver bullion, minerals, and ores, the greater portion of which are sent to the United States. The United States furnishes the bulk of the imports.

No trade papers are published in the consular district of Ceiba, and only two newspapers. One of these, *La Semana*, was only established a short time ago, and data concerning it are not available.

El Comercio (Spanish), Ceiba. Small newspaper, published Sundays and Thursdays. Advertising rates, 5 cents per inch per insertion. Annual subscription price, \$4.80. Circulation, about 500.

PUERTO CORTES.

[By Consul Claude I. Dawson.]

No trade journals are published in this district. Two newspapers are published and serve as advertising mediums for local industries, merchants, and professional men. The publication of these papers is liable to be suspended from time to time without notice.

El Progreso (Spanish), San Pedro Sula. Weekly newspaper. Advertising rates, \$48 per column (column, 15 inches) per year. Annual subscription price, \$2.40. Circulation (estimated), 2,000.

El Centro-Americano (Spanish), San Pedro Sula. Weekly newspaper. Advertising rates, \$48 per column (column, 24 by 18 inches) per year. Annual subscription price, \$2.40. Circulation (estimated), 2,000.

TEGUCIGALPA.

[By Consul A. T. Haebler.]

This district has only one newspaper and no trade journals of any kind.

El Nuevo Tiempo (Spanish), Tegucigalpa. Four-page daily, containing telegraphic news from the various departments of the Republic, and publishing cables received from other countries; approximately 1½ pages devoted to advertising. Advertising rates, 8 cents per inch per insertion. Annual subscription price, \$4. Circulation, about 3,000.

NICARAGUA.

CORINTO.

[By Consul James W. Johnson.]

No trade papers are published in this district. The principal newspapers are reported below. It has been impossible to obtain schedules of rates for advertising. It appears that there are no fixed rates for this service, but that charges depend on the character of the advertisement and the individual or concern by which it is inserted.

El Comercio (Spanish), Managua. Daily newspaper, reaching merchants and better class of citizens throughout western Nicaragua. Annual subscription price, \$3.43. Circulation, 2,500 to 3,000.

La Tarde (Spanish), Managua. Daily newspaper, reaching merchants and better class of citizens. Annual subscription price, \$3.43. Circulation, 1,000 to 1,500.

Diario de Nicaragua (Spanish), Managua. Daily newspaper, reaching merchants and better class of citizens. Annual subscription price, \$3.43. Circulation, 1,000 to 1,500.

El Independiente (Spanish), Leon. Daily newspaper, reaching merchants and better class of citizens. Annual subscription price, \$1.72. Circulation, 500 to 1,000.

El Diario Nicaraguense (Spanish), Granada. Daily newspaper, reaching merchants and better class of citizens. Annual subscription price, \$2.58. Circulation, 1,000 to 1,500.

BLUEFIELDS.

[By Consul Arthur J. Clare.]

Nicaragua has a frontage on both the Atlantic and Pacific Oceans, but lack of facilities for communication in the interior has hampered the development of agricultural, forest, and mineral resources. Coffee and bananas are the principal products. About half of the export and import trade is carried on with the United States. No trade journals are published in the consular district of Bluefields. The following are the principal newspapers:

The American (English), Bluefields. Weekly newspaper. Best advertising medium for the district, reaching the principal firms and mining interests. Advertising rates, \$1 per inch per month. Annual subscription price, \$4.80. Circulation, about 500.

El Heraldo (Spanish), Bluefields. Weekly newspaper. Advertising rates, about \$1 per inch monthly; special rates furnished. Annual subscription price, \$6. Circulation, about 300.

PANAMA.**COLON.**

[By Consul James C. Kellogg.]

Panama has practically no manufactures. The principal exports are bananas, coconuts, hides and skins, ivory nuts, rubber, and hardwood, of which the United States receives the greater portion. More than half of the imports are furnished by the United States and consist chiefly of foodstuffs, textiles, and hardware.

No trade papers are published in the consular district of Colon, and the leading newspapers are reported below:

Independent (English), Colon. Triweekly newspaper. Advertising rates, 8 cents per inch per insertion. Annual subscription price, \$5. Circulation, about 1,500.

Colon Starlet (English), Colon. Triweekly newspaper. Advertising rates, 10 cents per inch per insertion. Annual subscription price, \$5. Circulation, about 1,500.

PANAMA.

[By Consul General Alban G. Snyder.]

There are no strictly trade papers published in this district and only the more important newspapers are given in this report, as they are the only publications that would prove advantageous to business men in advertising their products. It is not believed that extensive advertising in any of these papers would prove of marked advantage to American interests not represented on the ground. Their circulation is confined almost entirely to the cities of Panama and Colon and intervening Canal Zone towns. Most of the advertisements are of local enterprises or of foreign goods represented by local agents, and as a general rule advertising here does not attract the attention or produce the results that business men in the United States are accustomed to.

Diario de Panama (Spanish), Panama. Daily newspaper, reaching all classes and accepting all kinds of advertising. Advertising rates, 10 cents per inch per insertion. Annual subscription price, \$12. Circulation, 7,000 to 8,000.

Panama Journal (English), Panama. Daily newspaper recently started. Annual subscription price, \$9.

Panama Star and Herald (English and Spanish), Panama. Daily newspaper, reaching all classes and accepting all kinds of advertising. Advertising rates furnished upon application. Annual subscription price, \$12. Circulation, estimated, 10,500.

SALVADOR.

[By Vice Consul General Harold D. Clum, San Salvador.]

Agriculture is the leading industry of Salvador, and the chief product is coffee. The country is rich in minerals; gold, silver, copper, and iron being worked to a considerable extent in parts where there are transportation facilities. The United States takes about one-third of the exports, consisting chiefly of coffee, precious metals, indigo, and sugar. The imports are cotton, drugs, food-stuffs, and manufactures of iron and steel. No trade journals are published in this district.

Diario del Salvador (Spanish), San Salvador. Daily newspaper, reaching all parts of the Republic. Advertising rates, 60 cents per inch per insertion, first page; 20 cents, second and third pages; and 30 cents fourth page. Foreign annual subscription price, \$10. Circulation, 8,000.

Diario Latino (Spanish), San Salvador. Daily newspaper, reaching all parts of the Republic. Advertising rates, 60 cents per inch per insertion, first page; 48 cents, second page; 45 cents, third page; and 54 cents, fourth page. Foreign annual subscription price, \$5. Circulation, about 3,000.

Diario de Occidente (Spanish), Santa Ana. Daily newspaper, widely read in the western part of the Republic. Advertising rates, 10 cents per inch per insertion, second and third pages, and 15 cents fourth page. Foreign annual subscription price, \$7. Circulation, 4,000.

CHINESE TRADE REVIVAL.

[Hankow correspondence in London Times.]

Activity in the Central Provinces.

I have just returned from a visit to Changsha, in Hunan, where I was favorably impressed by the activity of trade and the excellent order maintained. The port has hitherto been confined to inland navigation, but this season British ocean steamers are being employed to cope with the increased exports. This Province remained undisturbed throughout the revolution, and it is generally expected that order will be maintained. As a proof of loyalty to the central Government, 300,000 taels (\$210,000) were recently placed at the disposal of Yuan Shih-kai.

The spring trade at Hankow has been enormous, as accumulated stocks had to be dealt with. These having now been shipped abroad, trade is again normal and is showing every prospect of a continuation of that remarkable expansion which has hitherto characterized this fast developing commercial emporium of Central China.

A preliminary agreement has just been signed between the Robert Dollar Syndicate and Li Yuan-hung for a loan of \$17,000,000 gold, bearing interest at 5 per cent [as indicated in Daily Consular and Trade Reports for June 11]. The loan is to be issued at 94 and to be repayable in 25 years and is practically unsecured except by the guaranty of the provincial government. It is reported that Peking has approved. The object is the execution of public works in connection with the reconstruction of Hankow native city. It is understood that the syndicate expects large profits from the supply of material.

NICKEL VERSUS COPPER IN FRENCH COINAGE.

[Paris correspondence in London Times, June 10.]

M. Klotz, Minister of Finance, submitted at the last meeting of the Cabinet a proposal to substitute smaller perforated nickel coins for the present copper pieces of 5 and 10 centimes (100 centimes=1 franc=19.3 cents) which resemble the British halfpenny and penny pieces. The proposal, which will be tabled to-day in the Chamber of Deputies, contemplates the issue of 80,000,000 francs of the new perforated coinage in pieces of 5, 10, and 25 centimes. Nickel pieces of 25 centimes are already in circulation, but they are not perforated. The object of perforation is to make the new nickel coins distinguishable by the feel from coins of similar size in silver.

If Parliament adopts the Government proposals the value of the copper coin which will be withdrawn from circulation is estimated at 59,000,000 francs. The copper would be used for the future coinage of centimes—the smallest French coin—for colonial coinage, and for the execution of various orders for coins received from abroad.

PROPOSALS FOR GOVERNMENT SUPPLIES.

[No further particulars are available in the Bureau of Manufactures regarding these projects. Correspondence should be direct with the offices named.]

- No. 714. Alterations in heating and lighting fixtures.**—Sealed proposals will be received at the office of the Supervising Architect until July 5, 1912, for alterations in the heating apparatus, alterations in the lighting fixtures, and construction changes in the United States post office and courthouse at Manchester, N. H. Drawings and specifications may be had of the custodian or from the Supervising Architect.
- No. 715. Steel pile-driver hulls.**—Sealed proposals for building six steel pile-driver hulls will be received at the United States Engineer Office, Customhouse, St. Louis, Mo., until July 19, 1912. Information on application to Charles L. Potter, Lieutenant Colonel, Engineers.
- No. 716.—Lighting fixtures.**—Sealed proposals will be received at the Office of the Supervising Architect, Treasury Department, Washington, D. C., until July 24, 1912, for furnishing and installing lighting fixtures in the new United States post office at New York, N. Y., in accordance with drawings and specification, copies of which may be obtained at the Office of the Supervising Architect.
- No. 717. Ordnance supplies.**—Sealed proposals will be received at the office of the Chief of Ordnance, United States Army, Washington, D. C., until July 2, 1912, for furnishing and delivering f. o. b. contractor's works, 1,000 10-inch shells, cast iron, model of 1907, and 600 12-inch shells, cast iron, model of 1907. Instructions to bidders, specifications, etc., can be obtained upon application to the office of the Chief of Ordnance.
- No. 718. Portland cement and crushed rock or gravel.**—Sealed proposals for furnishing about 6,000 barrels of American Portland cement and crushed rock or gravel for Lock and Dam No. 8, Brazos River, delivered at Downs, Tex., will be received at the United States Engineer Office, Galveston, Tex., until July 19, 1912, and then publicly opened. Information on application to Earl I. Brown, Major, Engineers.
- No. 719. Levee work.**—Sealed proposals for constructing about 70,000 cubic yards of levee work, closing breaks in Cairo drainage district levee, will be received at the office of the Mississippi River Commission, First and Second Districts United States Engineer Office, Customhouse, Memphis, Tenn., until July 1, 1912. Information upon application to Clarke S. Smith, Major, Engineers.
- No. 720. Machinery and valves.**—Sealed proposals for machinery and valves for new lock at St. Marys Falls Canal, Sault Ste. Marie, Mich., will be received at the United States Engineer Office, 337 Federal Building, Detroit, Mich., until July 25, 1912. Information on application to C. McD. Townsend, Colonel, Engineers.

FOREIGN TRADE OPPORTUNITIES.

[Inquiries in which addresses are omitted are on file at Bureau of Manufactures. In applying for addresses refer to file number.]

Consuls are requested to contribute to this department, and in doing so should in each instance state in what language correspondence should be conducted.

- No. 9102. Agricultural machinery, technical articles, and rubber goods.**—The Bureau of Manufactures is in receipt of a communication from a business house stating that a Russian concern, the senior member of which is at present on a visit to the United States, desires to form connections with American manufacturers of agricultural machinery and supplies, technical articles, and rubber goods of various kinds. He is also seeking a market for rubber waste. References are furnished, and his address while in the United States will be supplied to interested firms.
- No. 9103. Agencies for various lines of American goods.**—An American consul reports that a business firm in his district wishes to correspond with American manufacturers with the idea of securing agencies on a commission basis for the following lines: Dry goods, hats, boots and shoes, sewing machines, rubber goods, carriages, glassware, crockery, trunks, and jewelry.
- No. 9104. Bids for steamship contract.**—Owing to dissatisfaction with present shipping facilities, a foreign Government will inaugurate a new steamship line within a few months to run between a local port and an American seaport. For local shipping another vessel will also be contracted for, to be not less than 500 tons. Copies of specifications and terms of contract governing both of these matters, which were forwarded by an American consul, can be obtained by addressing the Bureau of Manufactures.

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